

G**T****Consulting****S**

1396 White Bridge Road

Chittenango, NY 13037

Tel: (315) 391-5110 Fax: (315) 687-6267

October 15, 2019

Laker Development NY, LLC
125 High Rock Avenue
Saratoga Springs, NY 12866

Attn: Mr. Devin Dal Pos

**Re: Preliminary Traffic Impact Assessment – Proposed Mixed Use Development
547 East Genesee Street – Fayetteville, NY**

Dear Mr. Dal Pos:

I have completed my preliminary review of the traffic impacts associated with the proposed mixed use development at 547 East Genesee Street in Fayetteville, NY. This letter summarizes the work completed in this review as well as my findings.

Project Understanding

The project site is located on the north side of East Genesee Street between the existing Circle K and the post office in Fayetteville, NY. The site was previously occupied by the O'Brien & Gere manufacturing facility, but has been vacant for a number of years. The proposed development includes a 56,550 SF supermarket, a 64 unit memory care facility and a 3,500 SF retail/urgent care building. Access to the development is proposed via one full access driveway opposite Tracy Lumber and one right in/right out only driveway at the existing site access location.

This preliminary traffic impact assessment has been completed using data from the Fayetteville Village Apartments traffic study prepared by SRF Associates in December 2017.

A concept plan developed by Napierala Consulting has been attached.

Existing Operations

The 2019 weekday morning and evening peak hour traffic volumes were taken from the 2017 Fayetteville Village Apartments traffic study, prepared by SRF Associates, for the following study area intersections:

- East Genesee Street @ Salt Springs Road
- East Genesee Street @ Route 257
- Route 257 @ Salt Springs Road
- East Genesee Street @ Tracy Lumber
- East Genesee Street @ Existing Site Access
- East Genesee Street @ US Post Office Exit Driveway

Mr. Del Pos
October 15, 2019
Page 2 of 8

**Re: Preliminary Traffic Impact Assessment – Proposed Mixed Use Development
547 East Genesee Street – Fayetteville, NY**

The 2019 traffic volumes are based on traffic counts collected in February 2015 when area schools were in session and a 0.5% annual growth rate from 2015 to 2019 (2% total).

Based on the traffic counts collected, the peak hours were identified as follows:

Morning Peak Hour – 7:30am to 8:30am
Evening Peak Hour – 4:45pm to 5:45pm

The 2019 existing traffic volumes are shown in the attached Figure 1 for the morning and evening peak hours. East Genesee Street (Route 5) is classified as an urban minor arterial roadway in the area. The roadway carries approximately 200 vehicles eastbound/500 vehicles westbound passing the site during the morning peak hour, and 600 vehicles eastbound/300 vehicles westbound passing the site during the evening peak hour. Route 257 is also a minor urban arterial roadway carrying approximately 200-300 vehicles in each direction during the peak hours.

The East Genesee Street/Route 257 intersection and Route 257/Salt Springs Road intersection are closely spaced and operate at one overall signalized intersection. Given the layout of the intersection and multiple signal phases needed to accommodate the existing traffic movements, the intersection operates with a 112 second cycle length during both the morning and evening peak hours. This longer cycle length and signal phasing results in over a minute between green phases for each traffic movement, making this intersection a critical point in the area roadway system that has longer traffic queues and delays during the peak commuter hours.

Capacity analysis of the existing traffic operations was completed using Synchro10, an industry accepted standard for the analysis of both signalized and unsignalized intersections that is based on methodologies developed in the Highway Capacity Manual. Intersection and individual movement operations are graded in terms of Level of Service ranging from A to F, as described in the HCM. For example, an unsignalized intersection movement with an average delay of 5 seconds per vehicle is considered a Level of Service A while an average delay per vehicle of 20 seconds is considered a C. A Level of Service D or better is generally considered acceptable for a signalized intersection while a Level of Service E or better is generally considered acceptable for an unsignalized intersection.

The existing peak hour factors and signal timing information were taken from the SRF traffic impact study.

The results of the capacity analysis indicate that signalized intersections of Route 257 with East Genesee Street and Salt Springs Road operate at overall Levels of Service (LOS) C or D during the peak hours with the following movements operating at LOS E or F:

Mr. Del Pos
October 15, 2019
Page 3 of 8

**Re: Preliminary Traffic Impact Assessment – Proposed Mixed Use Development
547 East Genesee Street – Fayetteville, NY**

- East Genesee Street WB left – LOS F – evening peak hour
- Route 257 SB Left at East Genesee Street – LOS E – evening peak hour
- Route 257 SB through/right at East Genesee Street – LOS E – morning and evening peak hours
- Route 257 SB Left/Through at Salt Springs Road – LOS F – evening peak hour.

All traffic movements in the study area at the unsignalized driveways are operating at C or better during the two peak hours with minimal delays on East Genesee Street.

The detailed Level of Service summary and capacity analysis printouts have been attached.

2021 Background Conditions

The proposed mixed use development is assumed to be completed by 2021, therefore 2021 was used as the design year for this study. In order to fully understand the impacts of the development on the adjacent roadway system, analysis of the operations immediately before the project opening must first be completed. The existing traffic volumes were adjusted by a 0.5% annual growth rate, consistent with previous studies, to account for any unknown development that may occur prior to completion of the project. The 2021 background traffic volumes with 1% total growth are shown in the attached Figure 2.

Capacity analysis of the 2021 background condition shows minimal increases in delays from the existing conditions during both peak hours. All Levels of Service are maintained with the exception of the Route 257 southbound through/right movement at East Genesee Street which drops from LOS E to F during the evening peak hour. The actual increase in delay is only 1 second per vehicle.

The detailed Level of Service summary and capacity analysis printouts have been attached.

Background Traffic Redistribution

Prior to completing the traffic projections with the proposed mixed use development. The existing site generated traffic volumes were redistributed to the proposed full access driveway and modified existing right in/right out only driveway as shown in Figure 3.

Trip Generation Estimate and Distribution

The proposed development includes a 56,550 SF supermarket, a 64 unit memory care facility and a 3,500 SF retail/urgent care building. Trips generated by the proposed facility were estimated using the ITE Trip Generation, 10th Edition, which is the industry accepted standard for estimating traffic generated by new developments. Land Use 850 – Supermarket, Land Use 630 – Clinic, and Land Use 620 – Nursing Home were used.

Mr. Del Pos
 October 15, 2019
 Page 4 of 8

**Re: Preliminary Traffic Impact Assessment – Proposed Mixed Use Development
 547 East Genesee Street – Fayetteville, NY**

Not all of the trips generated by the proposed supermarket will be new trips. A portion of the traffic generated will be drawn from traffic already passing the site on East Genesee Street and referred to as pass-by trips. The visitors will stop at the supermarket on their way to another location, such as stopping on their way home from work. Based on data in the ITE Trip Generation, the average pass-by rate for a supermarket is 36% during the evening peak hour. A 35% pass-by trip percentage was assumed during the evening peak hour and a 10% pass-by rate was assumed during the morning peak hour. All trips associated with the urgent care or memory care facility were assumed to be new trips only.

The following table summarizes the trip generation estimate for the proposed mixed use development at 547 East Genesee Street in Fayetteville, NY.

Trip Generation Summary

	Morning Peak Hour		Evening Peak Hour	
	Entering	Exiting	Entering	Exiting
Supermarket – 56,550 SF	130	86	267	256
Medical Building – 3,500 SF	10	3	3	8
Memory Care Facility – 64 Beds	8	3	5	9
Total Trips Generated	148	92	275	273
<i>Supermarket Pass-by Trips – AM 10%, PM 35%</i>	<i>-11</i>	<i>-11</i>	<i>-91</i>	<i>-91</i>
Total New Trips Generated	137	81	184	182

Overall, the proposed development is expected to be a moderate to high traffic generator with approximately 100-150 trips entering and exiting during the morning peak hour and approximately 275 trips entering and exiting during the evening peak hour. The detailed trip generation calculations have been attached.

Based on existing traffic patterns and population centers in the area, 40% of the new trips generated are expected to travel to/from the east on East Genesee Street, 30% is expected to travel to/from the west on East Genesee Street, 15% is expected to travel to/from the south on Route 257, 10% is expected to travel to/from the north on Route 257 and 5% is expected to travel to/from the east on Salt Springs Road. Separate pass-by trip distributions were developed for the morning and evening peak hours based on the traffic splits passing the site on East Genesee Street. The anticipated arrival/departure distribution for the morning and evening peak hours are shown in Figures 4 and 5, respectively. The trips generated during each peak hour are shown in Figures 6 and 7, and the resultant 2021 full build traffic volumes expected when the development is complete are shown in Figure 8.



Mr. Del Pos
October 15, 2019
Page 5 of 8

**Re: Preliminary Traffic Impact Assessment – Proposed Mixed Use Development
547 East Genesee Street – Fayetteville, NY**

Turning Lane Warrant Review

The Transportation Research Board (TRB) National Cooperative Highway Research Program (NCHRP) Report 279 was reviewed to determine if turning lanes are warranted at the proposed site driveways.

With 190 vehicles advancing, 32% left turns and 529 opposing vehicles during the morning peak hour, and 543 vehicles advancing, 24% left turns and 340 opposing vehicles during the evening peak hour, a left turn lane is warranted at the proposed main site driveway.

With projected right turning volumes of 38 vehicles during the morning peak hour and 61 vehicles during the evening peak hour at the main site driveway a full right turn lane is not warranted. A right turn lane is also not warranted at the right in/right out driveway with only 27 vehicles turning right during the morning peak hour and 40 vehicles turning right during the evening peak hour. A right turn taper only is warranted at both locations.

Signal Warrant Analysis

A signal warrant analysis was completed for the East Genesee Street/Main Site Access intersection to confirm that a traffic signal would be justified at this location under the full build condition.

Hourly traffic volumes for the intersection were developed using the attached “Typical Variation in Hourly Volumes on Urban Streets”, Figure 3-5, developed by Northwestern University. The morning peak hour traffic volumes were extrapolated over the morning hours and the evening peak hour volumes were extrapolated over the afternoon hours for the resulting hourly volume of trips by time of day. The resulting hourly intersection volumes used for the signal warrant analysis have been attached.

Traffic Signal Warrant #1 – Eight Hour Vehicular Volume.

Condition A – Minimum Vehicular Volume

A signal is warranted when the mainline volume exceeds 500 vehicles in both directions combined and the side street exceeds 150 vehicles on one side for 8 hours in one day. **Condition A is not met under full build conditions.**

Condition B – Interruption of Continuous Traffic

A signal is warranted when the mainline volume exceeds 750 vehicles in both directions combined and the side street exceeds 75 vehicles on one side for 8 hours in one day. **Condition B is not met under full build conditions.**

Mr. Del Pos
October 15, 2019
Page 6 of 8

**Re: Preliminary Traffic Impact Assessment – Proposed Mixed Use Development
547 East Genesee Street – Fayetteville, NY**

Combination of Conditions A and B

A signal is warranted when volumes meet 80% of the requirements for both Conditions A and B. The mainline volume must exceed 600 vehicles in both directions combined and the side street must exceed 120 vehicles on one side for 8 hours in one day. **The Combination of Conditions A and B is not met under full build conditions.**

Traffic Signal Warrant #1 is not met under full build conditions for Condition A, Condition B and the Combination of Conditions A & B.

Traffic Signal Warrant #2 – Four-Hour Vehicular Volume

This warrant is similar to Warrant #1 however is based on only four hours and requires higher side street volumes as shown in Figure 4C-1 of the MUTCD manual. **Traffic Signal Warrant #2 is not met under full build conditions.**

Traffic Signal Warrant #3 – Peak Hour

This warrant requires failing side street operations during the peak hour with a total hourly delay over 5 hours, more than 100 vehicles on the side street and a total intersection volume over 800 vehicles. The required delay threshold would be met as an unsignalized intersection under the full build condition during the evening peak hour. **Traffic Signal Warrant #3 is met under full build conditions.**

Traffic Signal Warrant #4 – Pedestrian Volume

This warrant requires high pedestrian volumes with less than 60 available gaps in traffic for the pedestrians to safely cross. **The warrant is not applicable to this project.**

Traffic Signal Warrant #5 – School Crossing

This warrant requires high student pedestrian volumes with few gaps in traffic for the pedestrians to safely cross. **The warrant is not applicable to this project.**

Traffic Signal Warrant #6 – Coordinated Signal System

This warrant applies when a traffic signal would be beneficial to maintain traffic progression through a coordinated corridor. **The warrant is not applicable to this project.**

Mr. Del Pos
October 15, 2019
Page 7 of 8

**Re: Preliminary Traffic Impact Assessment – Proposed Mixed Use Development
547 East Genesee Street – Fayetteville, NY**

Traffic Signal Warrant #7 – Crash Experience

This warrant can be applied based on accident history if the signal will improve safety. **The warrant is not applicable to this project.**

Traffic Signal Warrant #8 – Roadway Network

This warrant applies when a traffic signal would be beneficial to maintain traffic progression, platooning or improve traffic operations in some other manner in a roadway network. **The warrant is not applicable to this project.**

A traffic signal is justified at the East Genesee Street/Main Site Access intersection under the full build condition based on the peak hour warrant.

The detailed signal warrant analysis discussion is attached.

Build Operations

Based on the warrants reviewed and existing traffic operations in the study area, the following improvements are recommended and were included in the build conditions analysis:

- Construct a 200 foot eastbound left turn lane at the proposed main site driveway.
- Construct a 150 foot southbound right turn lane on the main site driveway exiting the development.
- Install a two phase coordinated traffic signal on East Genesee Street at the proposed main site driveway.
- Optimize signal timings at the East Genesee Street / Route 257 / Salt Springs Road intersections.

Capacity analysis of the build condition with the recommended improvements indicates that the development will have very little impact on overall traffic operations in the area. All Levels of Service at the signalized intersections are maintained or improved from the background condition during both peak hours with the exception of the East Genesee Street westbound through movement which drops from LOS C to D during the evening peak hour. The actual increase in delay is only 3 seconds per vehicle. The proposed signalized main site driveway will operate at overall LOS A during both peak hours and all unsignalized traffic movements will continue to operate at LOS C or better during both peak hours.

The detailed Level of Service and capacity analysis printouts have been attached.

Mr. Del Pos
October 15, 2019
Page 8 of 8

**Re: Preliminary Traffic Impact Assessment – Proposed Mixed Use Development
547 East Genesee Street – Fayetteville, NY**

Conclusions

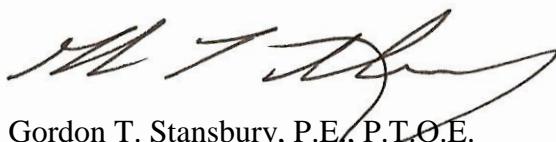
The additional traffic generated by the proposed mixed use development will have no significant impact on traffic operations on East Genesee Street provided that the following improvements are included:

- Construct a 200 foot eastbound left turn lane at the proposed main site driveway.
- Construct a 150 foot southbound right turn lane on the main site driveway exiting the development.
- Install a two phase coordinated traffic signal on East Genesee Street at the proposed main site driveway.
- Optimize signal timings at the East Genesee Street / Route 257 / Salt Springs Road intersections.

It is noted that the proposed traffic signal at the main site driveway could be used to facilitate a future connection to Salt Springs Road through the Tracy Lumber site as has been discussed with the NYSDOT and the Village of Fayetteville in the past. A future connection from East Genesee Street to Salt Springs Road has been identified as a possible improvement that could remove the Salt Springs Road approach to the Route 257 traffic signal, which in turn could significantly improve operations at the existing signalized intersections. While such an improvement is outside the reach of this proposed development, the proposed signal would not preclude this improvement from potentially being completed in the future.

If you have any questions or need additional information, please call.

Sincerely,



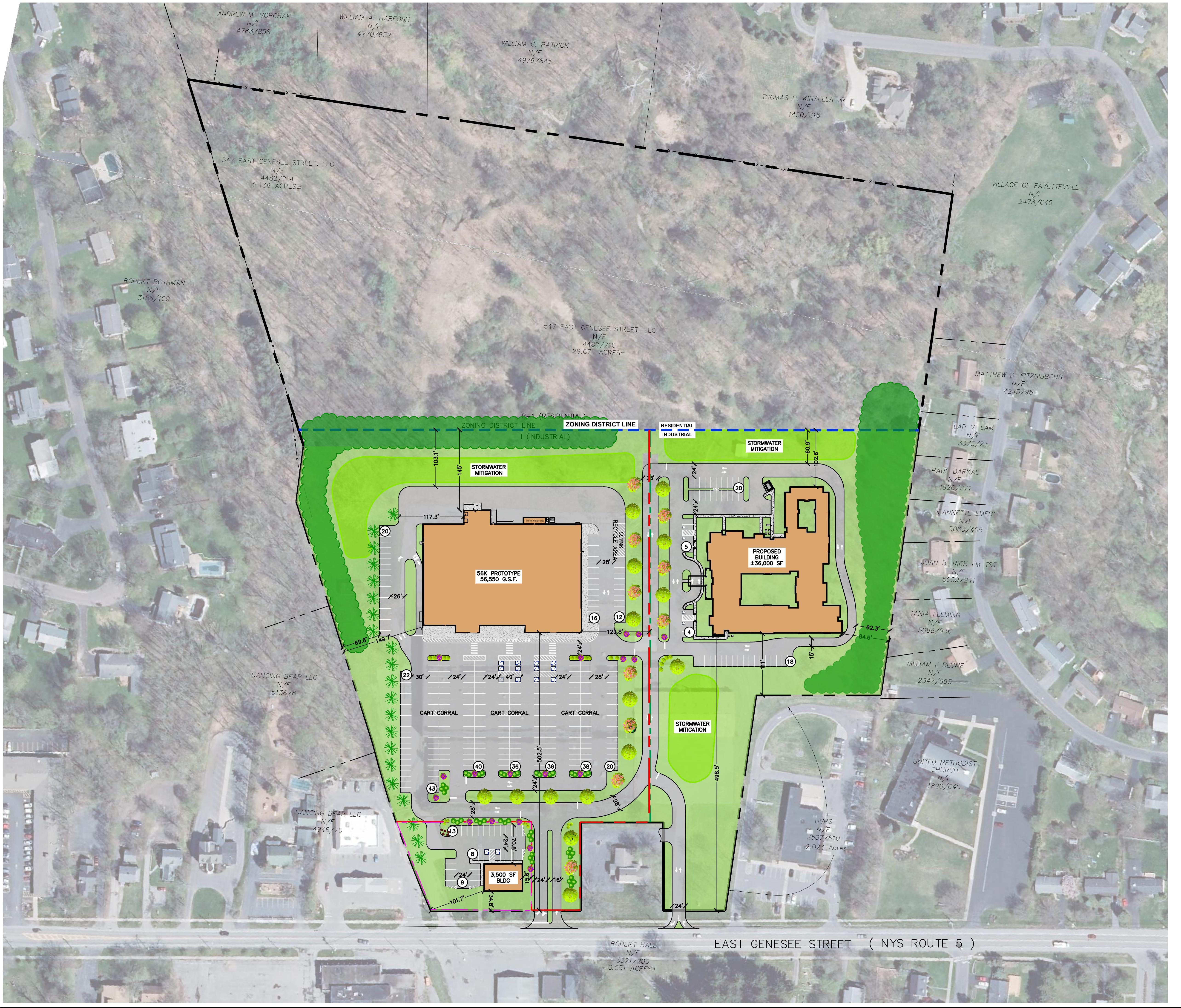
Gordon T. Stansbury, P.E., P.T.O.E.
GTS Consulting

Attachments –

Concept Plan
Gap Calculations
Capacity Printouts

Level of Service Summary
Trip Generation Estimate

Traffic Volume Figures 1-8
Signal Warrant Analysis



PROJECT SITE INFORMATION		
ADDRESS	547 GENESEE STREET (NYS ROUTE 5)	
TAX MAP ID NO.	009-04-19.1	
BOUNDARY SURVEY	PROPERTY LINE INFORMATION TAKEN FROM SURVEY BY O'BRIEN & GERE ENGINEERS, INC.	
TOTAL SITE AREA	32.92 ACRES	
LAND USE	GROCERY STORE, ASSISTED LIVING FACILITY, MEDICAL/OFFICE & RESIDENTIAL UNITS	
BUILDING SIZE	56,550 SF GROCERY, ±36,000 SF ASSISTED LIVING, 3,500 MEDICAL/OFFICE	

PROJECT TITLE: PROPOSED MIXED USE
547 GENESEE ST (ROUTE 5)
VILLAGE OF FAYETTEVILLE
ONONDAGA COUNTY, NY

PREPARED FOR:
MILLSTONE DEVELOPMENT GROUP, LLC.
125 HIGH ROCK AVENUE
SARATOGA SPRINGS, NY 12866

CONCEPT PLAN

SHEET TITLE:
VILLAGE OF FAYETTEVILLE

DATE:

NAPIERALA CONSULTING
PROFESSIONAL ENGINEER P.C.
SITE • DESIGN • ENGINEERING
110 FAHEY STREET
MANHATTAN, NEW YORK 10104
email: MANAP@NAPIERALA.COM
PH: (315) 692-5580 FAX: (315) 692-5544

NO.:

REVISION ISSUE

DATE:

PROJECT NO.:

SCALE:

1" = 80'

21 OCT 2019

19-1826

PRELIMINARY
FOR CONCEPT
REVIEW ONLY

PLAN SEAL BY:
MATTHEW NAPIERALA, P.E.
NYSP REGISTRATION # 088573

SK-7

COPYRIGHT © 2019
NAPIERALA CONSULTING
IT IS A VIOLATION OF LAW TO COPY OR
REPRODUCE ANY PART OF THIS DRAWING
EXCEPT AS AUTHORIZED IN THE
PRACTICE OF ARCHITECTURE ACT
AND THE RULES AND REGULATIONS
OF THE STATE BOARD OF ARCHITECTS
ANY PERSON WHO ATTEMPTS TO
DO SO MAY BE SUBJECT TO
CIVIL AND CRIMINAL PENALTIES
INCLUDING SEIZURE OF THE DRAWINGS
AND IMPRISONMENT.
THE ALTERATIONS
SHALL NOT BE MADE UNLESS
APPROVED IN WRITING BY THE
OWNER.

Proposed Mixed Use Development – 547 East Genesee Street – Fayetteville, NY
Intersection Level of Service Summary
Morning Peak Hour

Intersection		2019 Existing	2021 Background	2021 Build
East Genesee Street @ Salt Springs Road				
EB Through	a(0)	a(0)	a(0)	
EB Right	a(0)	a(0)	a(0)	
WB Through	a(0)	a(0)	a(0)	
East Genesee Street @ Route 257	D(38)	D(39)	D(43)	
EB Left	C(27)	C(27)	C(25)	
EB Through/Right	C(30)	C(30)	C(30)	
WB Left	C(25)	C(25)	C(24)	
WB Through/Right	D(50)	D(51)	D(52)	
NB Left	D(35)	D(37)	D(53)	
NB Through/Right	A(6)	A(6)	A(7)	
SB Left	D(50)	D(50)	D(48)	
SB Through/Right	E(60)	E(60)	D(50)	
Route 257 @ Salt Springs Road	C(23)	C(23)	C(26)	
EB Left	C(26)	C(26)	C(23)	
EB Through/Right	C(23)	C(23)	C(20)	
WB Left/Right	B(12)	B(13)	B(18)	
NB Through/Right	D(37)	D(37)	D(39)	
SB Left/Through	C(21)	C(21)	C(24)	
East Genesee Street @ Tracy Lumber / Proposed Access				A(6)
EB Left	-	-	A(4)	
EB Through/Right	a(0)	a(0)	A(3)	
WB Left/Through/(Right)	a(0)	a(0)	A(5)	
NB Left/(Through)/Right	b(13)	b(13)	A(1)	
SB Left/Through	-	-	C(30)	
SB Right	-	-	B(11)	
East Genesee Street @ Existing Access				
EB (Left)/Through	a(1)	a(1)	a(0)	
WB Through/(Right)	a(0)	a(0)	a(0)	
SB (Left)/Right	b(12)	b(12)	b(12)	
East Genesee Street @ Post Office Exit				
EB Through	a(0)	a(0)	a(0)	
WB Through	a(0)	a(0)	a(0)	
SB Left/Right	b(13)	b(13)	b(14)	

B(12) – Signalized Level of Service (Average Delay per Vehicle in Seconds)

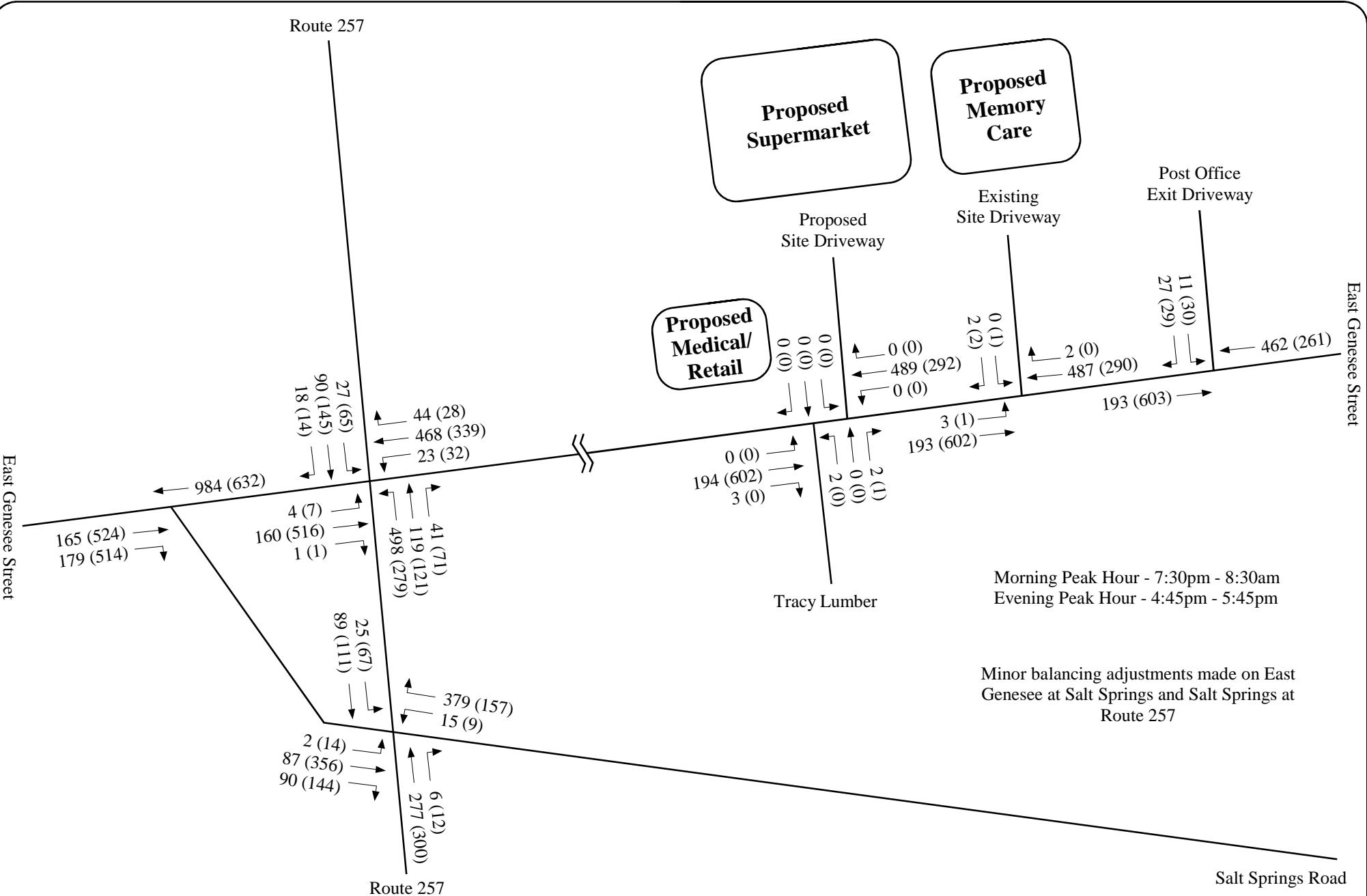
a(9) – Unsignalized Level of Service (Average Delay per Vehicle in Seconds)

Proposed Mixed Use Development – 547 East Genesee Street – Fayetteville, NY
Intersection Level of Service Summary
Evening Peak Hour

Intersection		2019 Existing	2021 Background	2021 Build
East Genesee Street @ Salt Springs Road				
EB Through	a(0)	a(0)	a(0)	
EB Right	a(0)	a(0)	a(0)	
WB Through	a(0)	a(0)	a(0)	
East Genesee Street @ Route 257	D(37)	D(38)	D(42)	
EB Left	C(24)	C(24)	C(21)	
EB Through/Right	D(42)	D(43)	D(49)	
WB Left	F(142)	F(179)	F(212)	
WB Through/Right	C(33)	C(34)	D(37)	
NB Left	B(14)	B(14)	B(17)	
NB Through/Right	A(4)	A(4)	A(4)	
SB Left	E(61)	E(62)	D(50)	
SB Through/Right	E(79)	F(80)	D(48)	
Route 257 @ Salt Springs Road	D(46)	D(47)	D(44)	
EB Left	D(35)	D(35)	C(32)	
EB Through/Right	D(40)	D(41)	D(39)	
WB Left/Right	B(13)	B(13)	B(15)	
NB Through/Right	D(36)	D(36)	D(36)	
SB Left/Through	F(107)	F(108)	F(86)	
East Genesee Street @ Tracy Lumber / Proposed Access			B(11)	
EB Left	-	-	A(8)	
EB Through/Right	a(0)	a(0)	A(8)	
WB Left/Through/(Right)	a(0)	a(0)	A(6)	
NB Left/(Through)/Right	b(13)	b(13)	A(0)	
SB Left/Through	-	-	C(34)	
SB Right	-	-	A(7)	
East Genesee Street @ Existing Access				
EB (Left)/Through	a(0)	a(0)	a(0)	
WB Through/(Right)	a(0)	a(0)	a(0)	
SB (Left)/Right	b(13)	b(13)	b(11)	
East Genesee Street @ Post Office Exit				
EB Through	a(0)	a(0)	a(0)	
WB Through	a(0)	a(0)	a(0)	
SB Left/Right	c(16)	c(17)	c(20)	

B(12) – Signalized Level of Service (Average Delay per Vehicle in Seconds)

a(9) – Unsignalized Level of Service (Average Delay per Vehicle in Seconds)



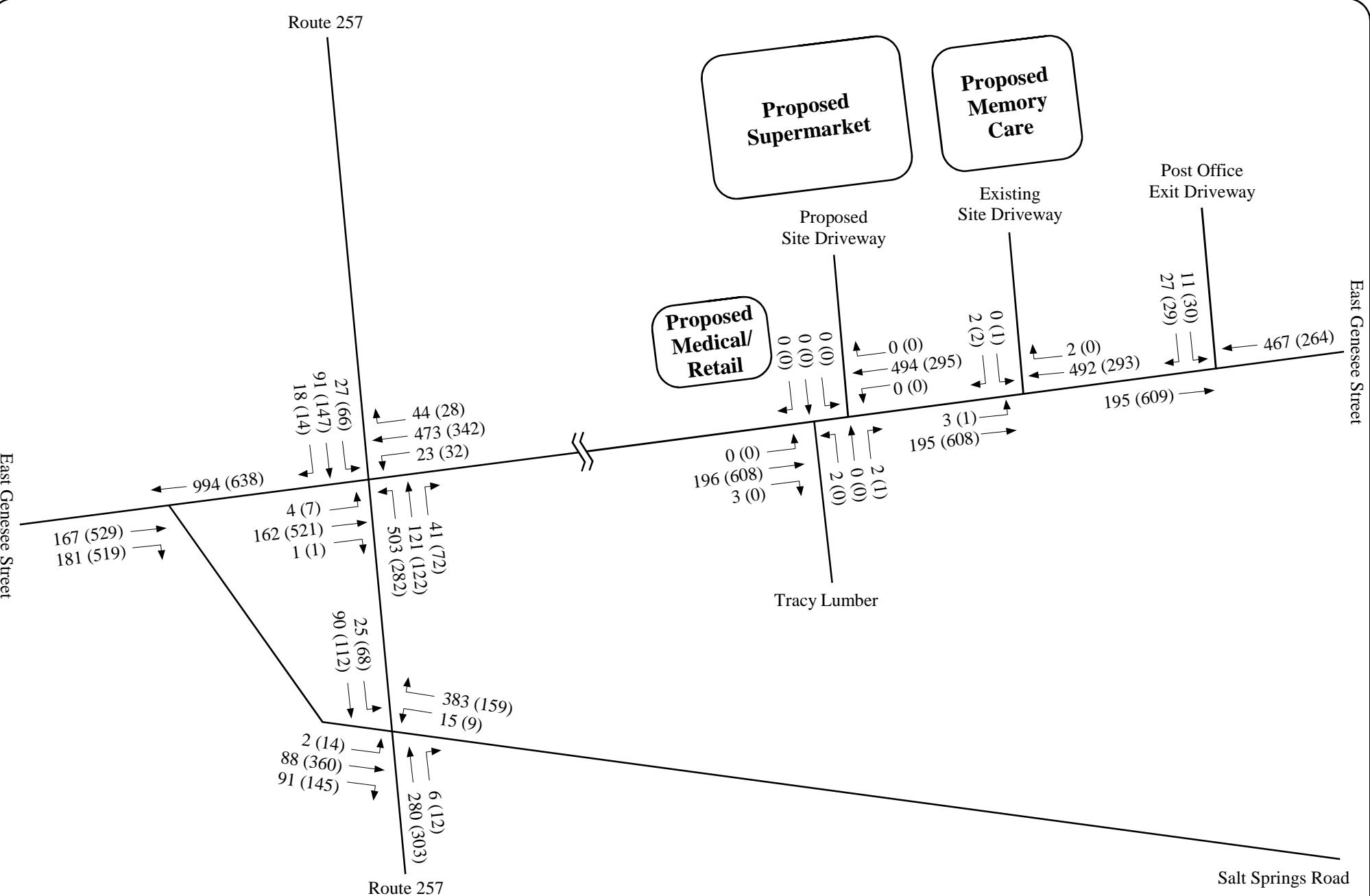
Proposed Mixed Use Development - 547 East Genesee Street - Fayetteville, NY

2019 Existing Traffic Volumes - Fayetteville Village Apartment Traffic Impact Study
Weekday Morning (Evening) Peak Hour

Figure 1

Not to Scale





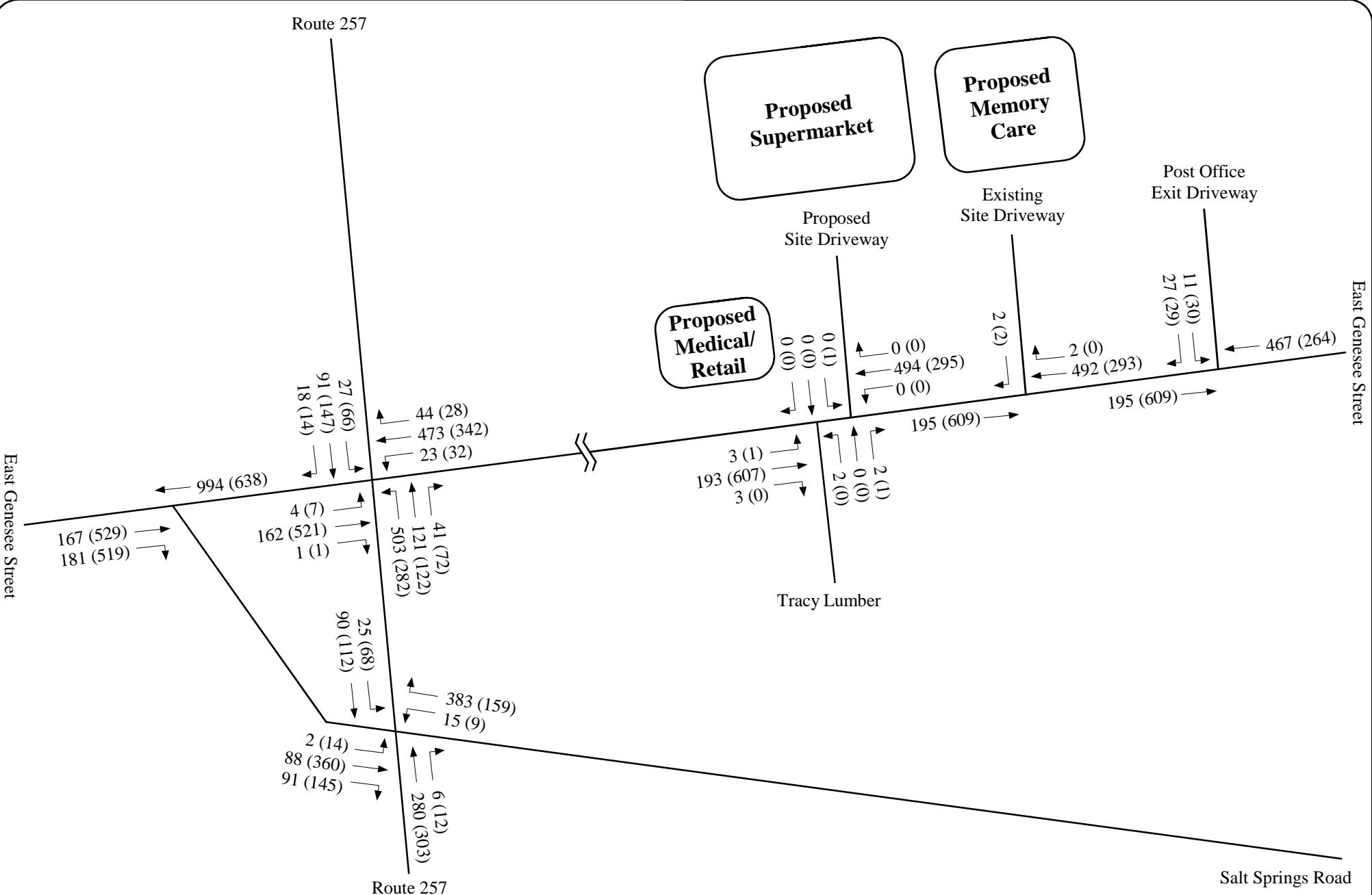
Proposed Mixed Use Development - 547 East Genesee Street - Fayetteville, NY

2021 Background Traffic Volumes - With 0.5% Growth per Year (1% Total) Weekday Morning (Evening) Peak Hour

Figure 2

Not to Scale





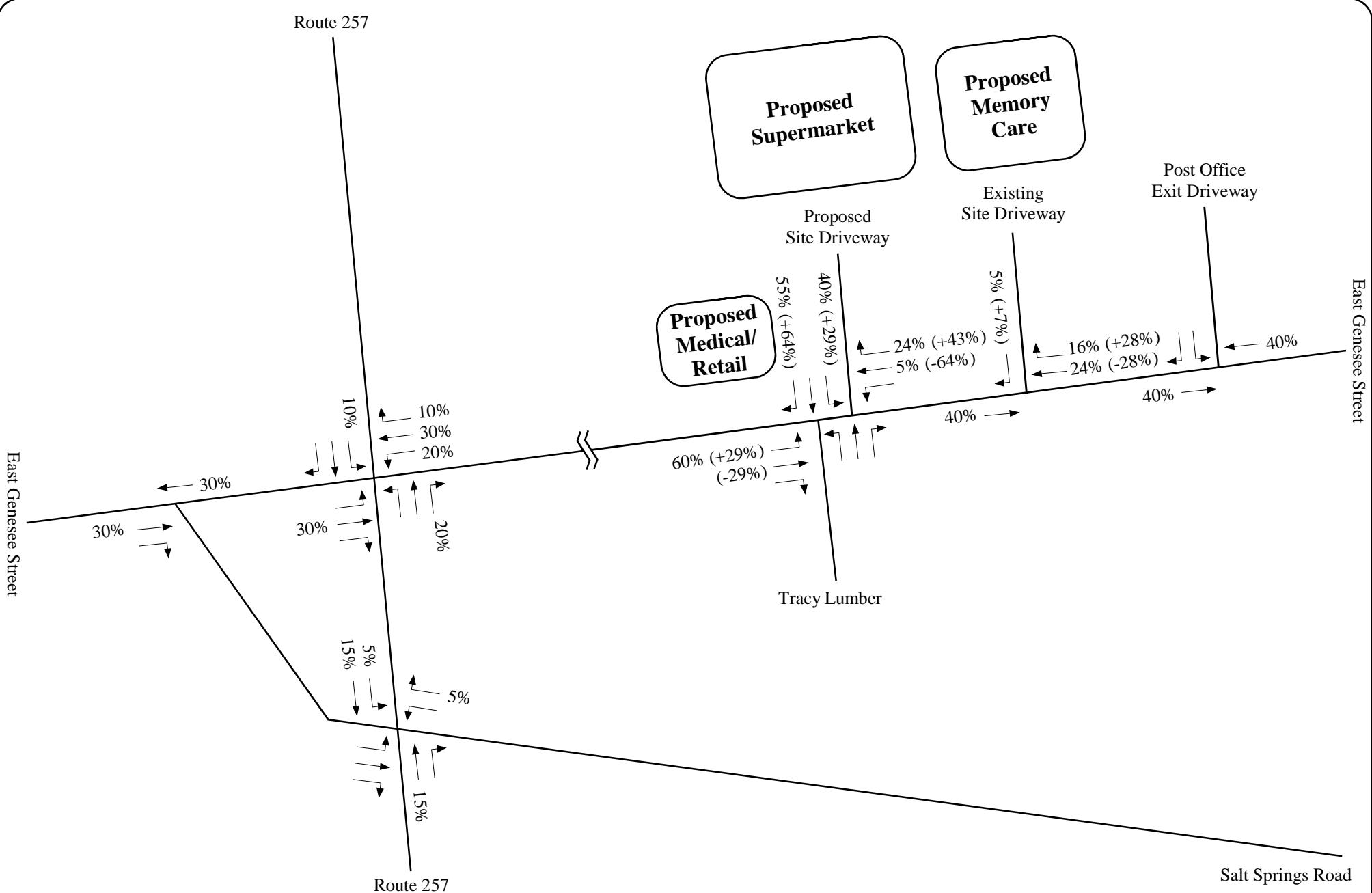
Proposed Mixed Use Development - 547 East Genesee Street - Fayetteville, NY

2021 Redistributed Background Traffic Volumes - With Proposed Access Weekday Morning (Evening) Peak Hour

Figure 3

Not to Scale





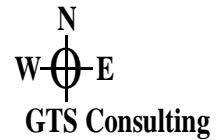
Proposed Mixed Use Development - 547 East Genesee Street - Fayetteville, NY

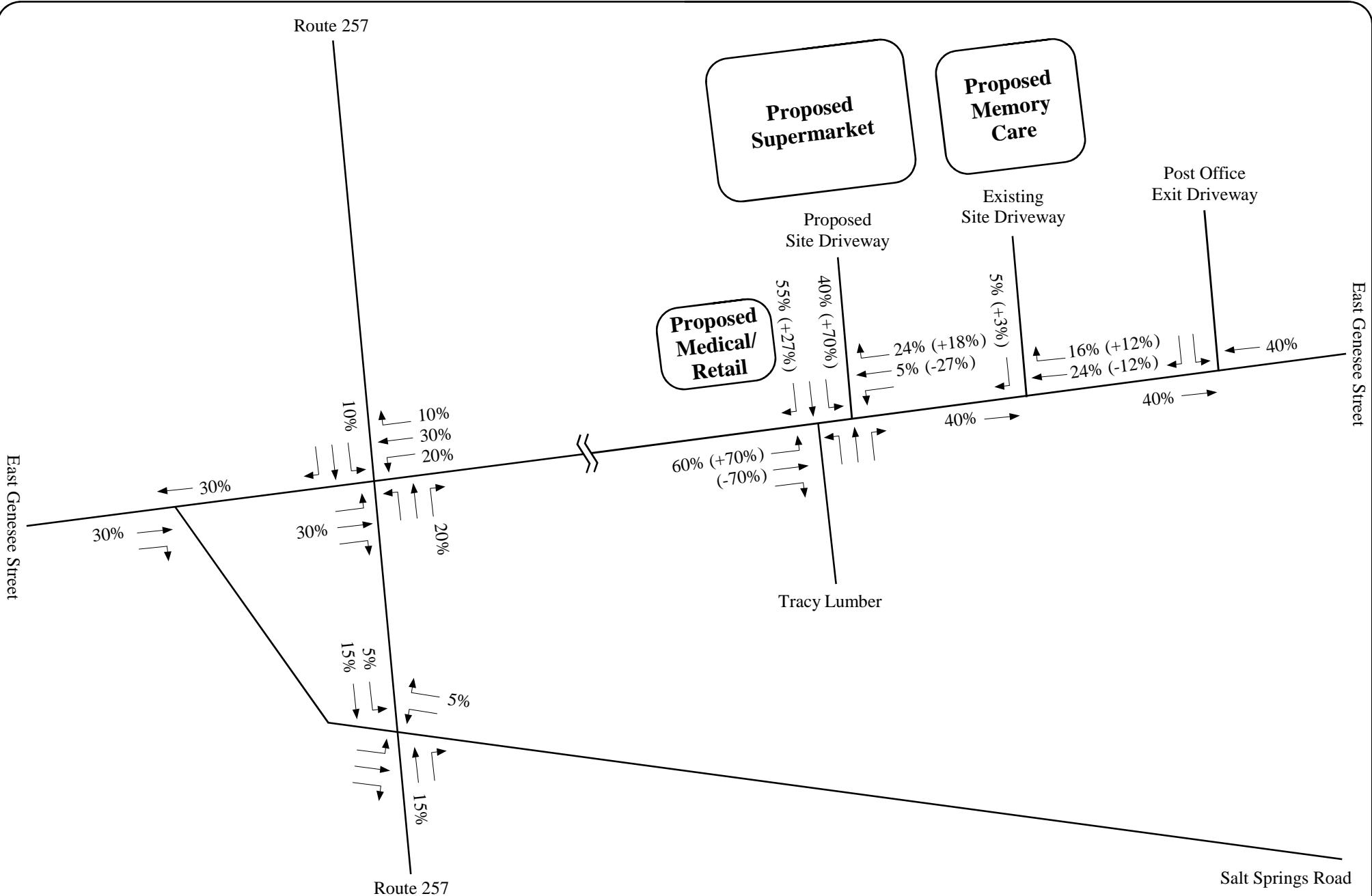
Arrival / Departure Trip Distribution - Morning Peak Hour

New (Pass-by) Trip Percentage

Figure 4

Not to Scale





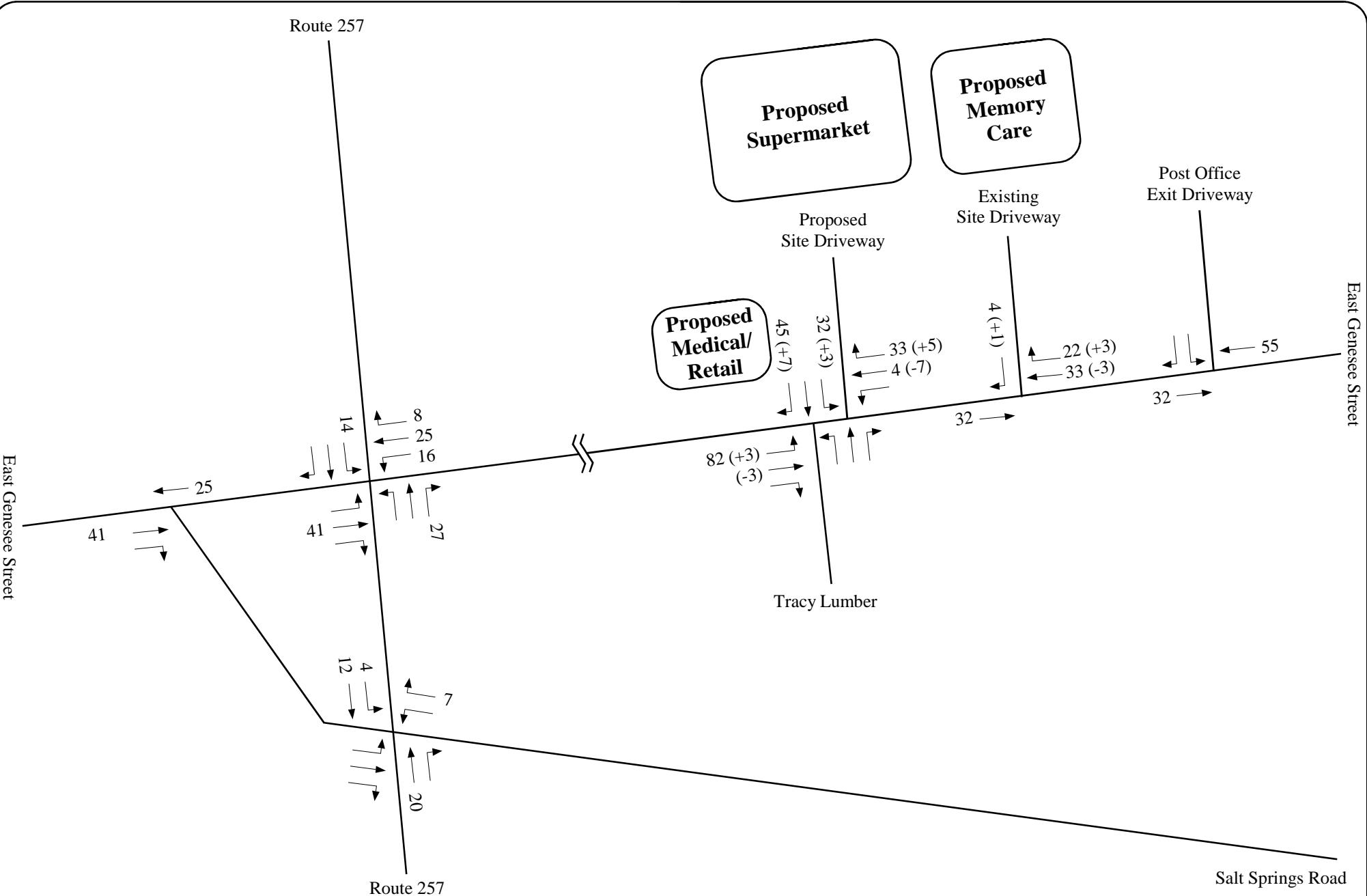
Proposed Mixed Use Development - 547 East Genesee Street - Fayetteville, NY

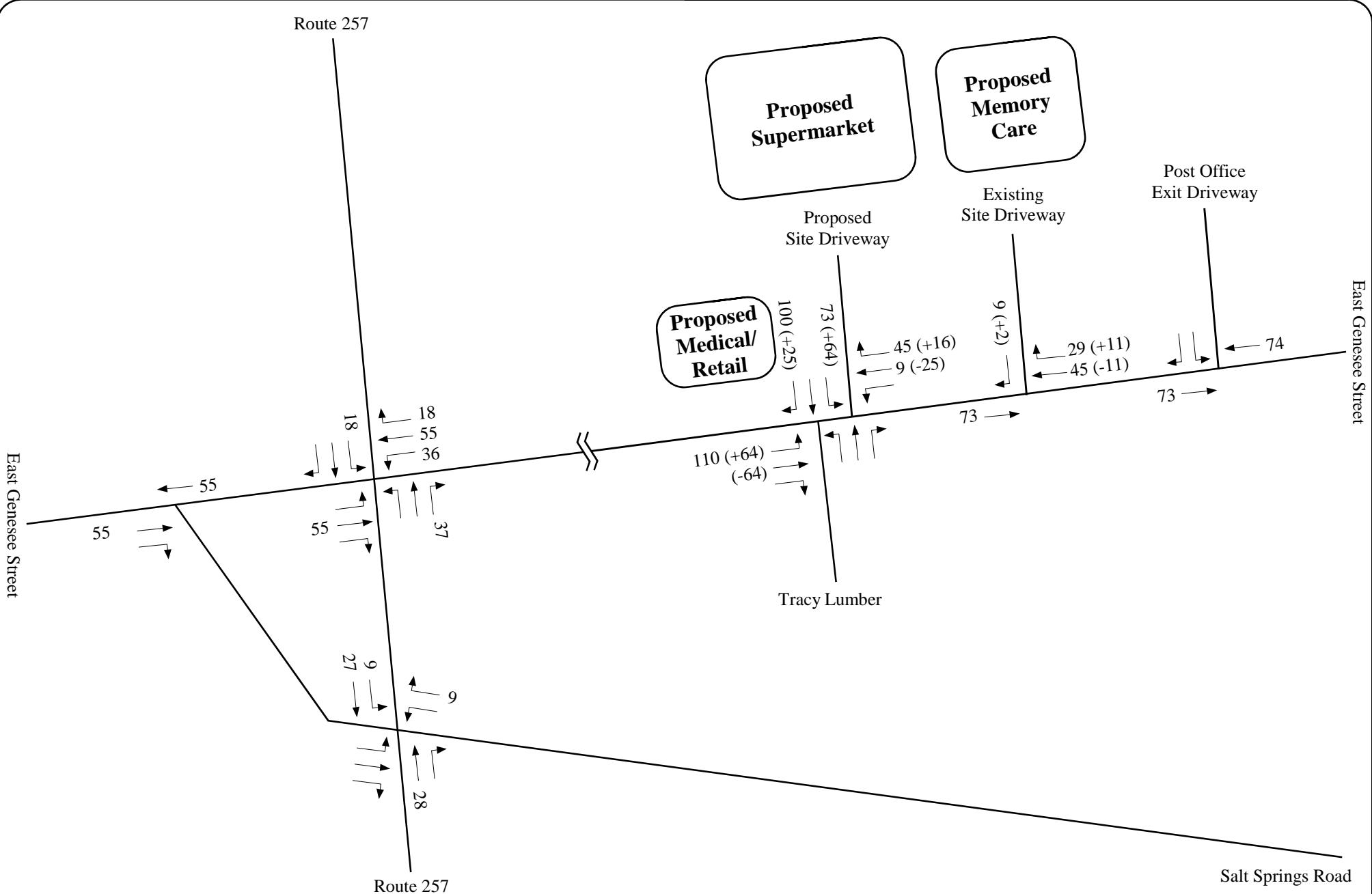
Arrival / Departure Trip Distribution - Evening Peak Hour
New (Pass-by) Trip Percentage

Figure 5

Not to Scale







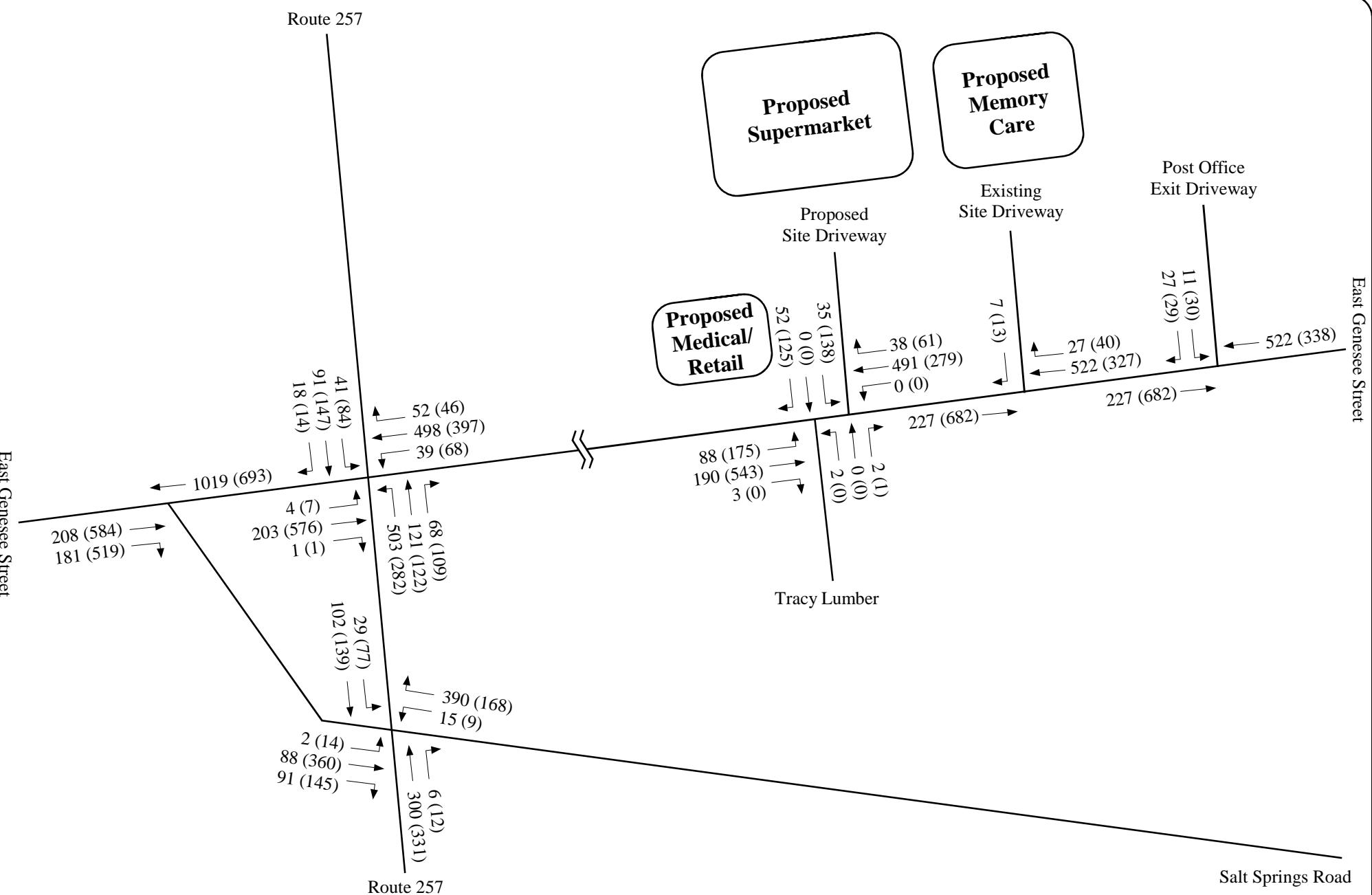
Proposed Mixed Use Development - 547 East Genesee Street - Fayetteville, NY

Arrival / Departure Trip Distribution - Evening Peak Hour New (Pass-by) Trip Percentage

Figure 7

Not to Scale





Proposed Mixed Use Development - 547 East Genesee Street - Fayetteville, NY

2021 Build Traffic Volumes
Weekday Morning (Evening) Peak Hour

Figure 8

N
W E
GTS Consulting

Not to Scale

Proposed Mixed Use Development
547 East Genesee Street, Fayetteville, NY
Trip Generation Estimate

Proposed Development	56,550 SF - Supermarket 3,500 Retail/Medical Building 64 Unit - Memory Care Facility
----------------------	--

ITE Trip Generation - 10th Edition

Land Use 850 - Supermarket

AM Peak Hour	3.82 Trips/1,000 SF	60% Enter	40% Exit
PM Peak Hour	9.24 Trips/1,000 SF	51% Enter	49% Exit

Land Use 630 - Clinic

Morning Peak Hour	3.69 Trips/1,000 SF	78% Enter	22% Exit
Evening Peak Hour	3.28 Trips/1,000 SF	29% Enter	71% Exit

Land Use 620 - Nursing Home

Morning Peak Hour	0.17 Trips/Bed	72% Enter	28% Exit
Evening Peak Hour	0.22 Trips/Bed	33% Enter	67% Exit

Average Pass-by Percentages

Land Use 850 - Supermarket, PM - 36% - Assume 10% AM, 35% PM

All trips associated with medical care / memory care are considered new trips

Trip Generation Estimate - Mixed Use Development

Development	Size	Morning Peak Hour			Evening/Saturday Peak Hour		
		Total Trips	Entering	Exiting	Total Trips	Entering	Exiting
Supermarket	56,550 SF	216	130	86	523	267	256
Medical Building	3,500 SF	13	10	3	11	3	8
Memory Care	64 Beds	11	8	3	14	5	9
Total Trips Generated		240	148	92	548	275	273
<i>Supermarket Pass-by Trips AM 10%, PM 35%</i>		<i>-22</i>	<i>-11</i>	<i>-11</i>	<i>-182</i>	<i>-91</i>	<i>-91</i>
Total New Trips Generated		218	137	81	366	184	182

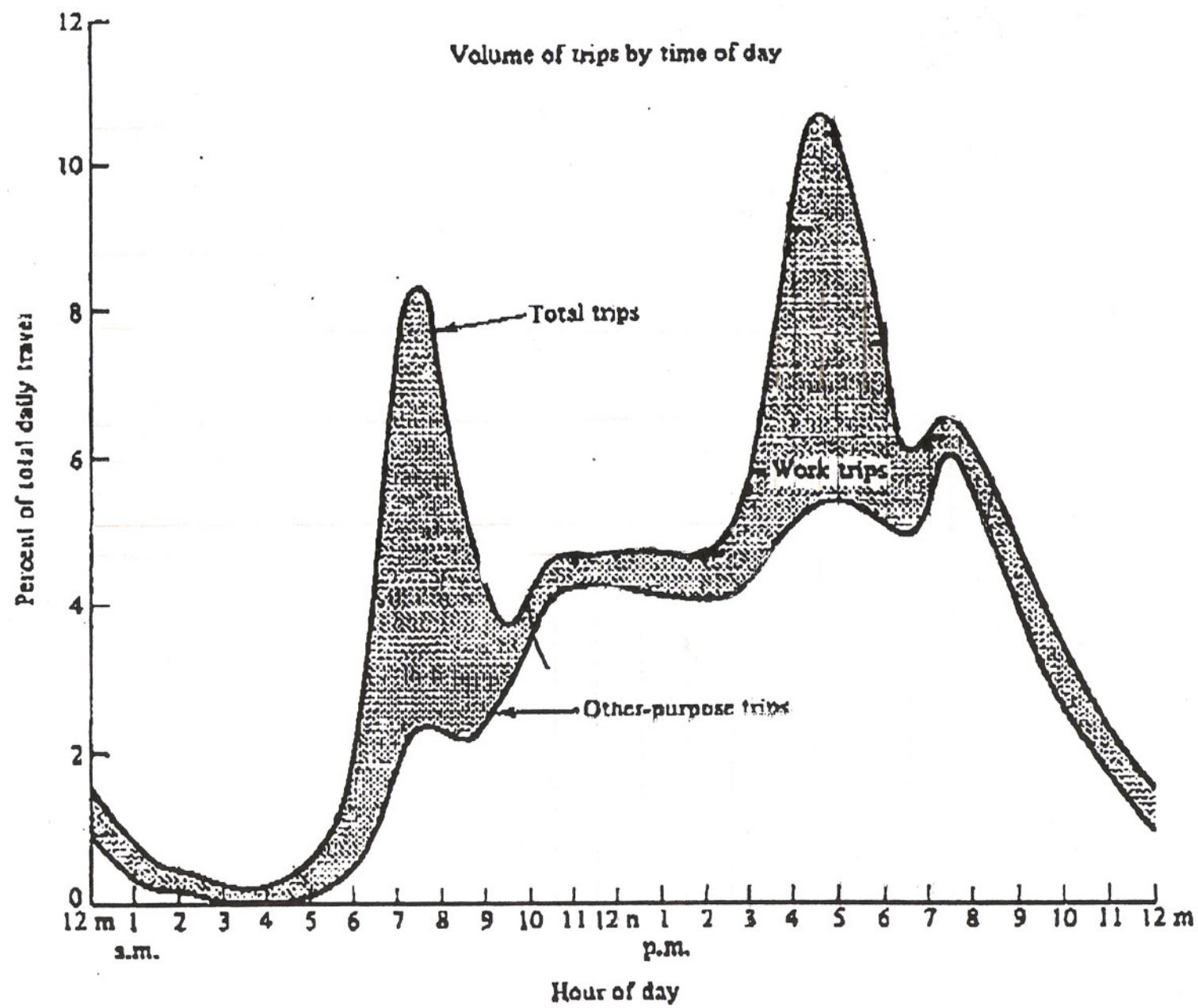


Figure 3-5 Typical variation in hourly volumes on urban streets.
SOURCE: The Traffic Institute, Northwestern University [19].

East Genesee Street (Route 5) @ Main Site Access

	Full Build Traffic Volumes - Distributed by Typical Hourly Variation												
	6-7am	7-8am	8-9am	9-10am	10-11am	11-12pm	12-1pm	1-2pm	2-3pm	3-4pm	4-5pm	5-6pm	6-7pm
% of AADT*	4.00%	7.10%	6.30%	4.30%	4.25%	4.50%	4.50%	4.45%	4.70%	6.20%	9.00%	9.60%	7.35%
EBL	50	88	78	53	53	56	82	81	86	113	126	175	134
EBT	107	190	169	115	114	120	255	252	266	351	390	543	416
EBR	0	0	0	0	0	0	0	0	0	0	0	0	0
approach total	157	278	247	168	166	176	337	333	352	464	515	718	550
WBL	0	0	0	0	0	0	0	0	0	0	0	0	0
WBT	277	491	436	297	294	311	131	129	137	180	200	279	214
WBR	21	38	34	23	23	24	29	28	30	39	44	61	47
approach total	298	529	469	320	317	335	159	158	166	220	244	340	260
NBL	1	2	2	1	1	1	0	0	0	0	0	0	0
NBT	0	0	0	0	0	0	0	0	0	0	0	0	0
NBR	1	2	2	1	1	1	0	0	0	1	1	1	1
approach total	2	4	4	2	2	3	0	0	0	1	1	1	1
SBL	20	35	31	21	21	22	65	64	68	89	99	138	106
SBT	0	0	0	0	0	0	0	0	0	0	0	0	0
SBR	29	52	46	31	31	33	59	58	61	81	90	125	96
approach total	49	87	77	53	52	55	123	122	129	170	189	263	201
Total	506	898	797	544	538	569	620	613	647	854	949	1322	1012

*AADT Percentages based on Figure 3-5, Typical variation in hourly volumes on urban streets.

Morning volumes (6:00 am to 12:00 pm) are based on morning peak hour volumes.

Evening volumes (12:00 pm to 7:00 pm) are based on evening peak hour volumes.

Proposed Mixed Use Development – Fayetteville, NY
East Genesee Street (Route 5) @ Main Site Access
2021 Build Condition - 10/14/19

DEFINITIONS and CHECK of TRAFFIC SIGNAL WARRANTS

The Manual of Uniform Traffic Control Devices (MUTCD) published by the Federal Highway Administration lists 8 minimum warrants for signalization. Primary ones reviewed follows:

Warrant 1: Eight Hour Vehicular Volume

Condition A – Minimum Vehicular Volume is met when the traffic volumes for any eight hours of an average day meet the minimum requirements given in Table 4C-1 of the MUTCD based on the number of approach lanes to the intersection. For the major street, the total volume for both approaches is used. For the minor street, the higher volume approach (one direction only) is used. The same 8 hour-period should be used for both the major street and the minor street.

- One through lane per direction on mainline – Volume must exceed 500 vehicles
- One lane on site driveway – Volume must exceed 150 vehicles

2021 Build Condition

- Mainline Thresholds are met for 8 hrs
- Side Street Thresholds are met for 4 hrs

Warrant #1, Condition A: Not Met Under Build Condition

Condition B - Interruption of Continuous Traffic accommodates operating conditions where extremely heavy major-street traffic causes excessive delay or hazards to the minor street traffic. The warrant is satisfied when the traffic volumes of any 8 hours of an average day meet the minimum requirements given in Table 4C-1 of the MUTCD and the signal installation will not seriously disrupt progressive traffic flow on the major street. For the major street, the total volume for both approaches is used. For the minor street, the higher volume approach (one direction only) is used. The same 8 hour-period should be used for both the major street and the minor street.

- One through lane per direction on mainline – Volume must exceed 750 vehicles
- One lane on site driveway – Volume must exceed 75 vehicles

2021 Build Condition

- Mainline Thresholds are met for 4 hrs
- Side Street Thresholds are met for 9 hrs

Warrant #1 – Condition B: Not Met Under Build Condition

Combination of Conditions A and B recognizes that there are occasional cases in which signalization may be justified but the locations do not meet the minimum requirements of a single warrant. This condition permits a signal installation to be considered where Conditions A and B, are satisfied to the extent of 80% of the established numerical value. For the major street, the total volume for both approaches is used. For the minor street, the higher volume approach

(one direction only) is used. The same 8 hour-period should be used for both the major street and the minor street.

- 80% Condition A – Mainline greater than 400 vehicles, Side greater than 120 vehicles
- 80% Condition B – Mainline greater than 600 vehicles, Side greater than 60 vehicles

2021 Build Condition

Condition A

- Mainline Thresholds are met for 13 hrs
- Side Street Thresholds are met for 7 hrs

Condition B

- Mainline Thresholds are met for 6 hrs
- Side Street Thresholds are met for 9 hrs

Warrant #1 - Combination of Conditions A and B: Not Met Under Build Condition

Warrant 2: Four-Hour Vehicular Volume is based on 4-hour volumes instead of the eight hour volumes used in Warrants 1, 2 and 8. The wording of the warrant states that this warrant is satisfied (for urban locations) when, for each of any 4 hours of an average day, the plotted points representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only) exceed the curve shown in Figure 4C-1 of the MUTCD.

Volume Thresholds are met for 3 hrs – Build Condition

Warrant #2 – Four Hour Vehicular Volume: Not Met Under Build Conditions

Warrant 3: Peak-Hour is satisfied when **all** the following conditions are met:

- The total delay experienced by the traffic on the side street controlled by a STOP sign equals or exceeds 4 vehicle-hours for a one lane approach and 5 vehicle hours for a two-lane approach.
- The volume on the side-street approaches equals or exceeds 100 vph for a one-lane approach or 150 vph for a two-lane approach.
- The total entering volume serviced during this hour equals or exceeds 800 vph for intersections with four (or more) approaches or 650 vph for intersections with three approaches.

Evening peak hour delays and volumes without traffic signal meet warrant under build condition

Warrant #3 – Peak Hour: Met Under Build Conditions

Warrant #4 – Pedestrian Volume – The existing pedestrian volumes are minimal in the area and would not meet the warrant.

Warrant #4 – Pedestrian Volume: Not Met

Warrant #5 – School Crossing – not applicable

Warrant #5 – School Crossing – Not Applicable

Warrant #6 – Coordinated Signal System – not applicable

Warrant #6 – Coordinated Signal System: Not Applicable

Warrant #7 – Crash Experience – The existing accident history does not meet thresholds to warrant a traffic signal.

Warrant #7 – Crash Experience: Not Met

Warrant #8 – Roadway Network – not applicable

Warrant #8 – Roadway Network: Not Applicable

Lanes, Volumes, Timings

1: Salt Springs Road & East Genesee Street

10/15/2019

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations	↑	↖		↑		
Traffic Volume (vph)	165	179	0	984	0	0
Future Volume (vph)	165	179	0	984	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		175	0		0	0
Storage Lanes		1	0		0	0
Taper Length (ft)			25		25	
Satd. Flow (prot)	1863	1583	0	1863	0	0
Flt Permitted						
Satd. Flow (perm)	1863	1583	0	1863	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1283			368	438	
Travel Time (s)	29.2			8.4	10.0	
Peak Hour Factor	0.80	0.80	0.98	0.98	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	206	224	0	1004	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 55.1%

ICU Level of Service B

Analysis Period (min) 15

Lanes, Volumes, Timings

2: Route 257 & East Genesee Street

10/15/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑		↑	↑		↑	↑		↑	↑	
Traffic Volume (vph)	4	160	1	23	468	44	498	119	41	27	90	18
Future Volume (vph)	4	160	1	23	468	44	498	119	41	27	90	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	135		0	0		0	175		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1861	0	1770	1839	0	1770	1790	0	1770	1816	0
Flt Permitted	0.140			0.526			0.571			0.647		
Satd. Flow (perm)	261	1861	0	980	1839	0	1064	1790	0	1205	1816	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					5				20			7
Link Speed (mph)		30			30				30			30
Link Distance (ft)		368			1326				189			681
Travel Time (s)		8.4			30.1				4.3			15.5
Peak Hour Factor	0.69	0.69	0.69	0.94	0.94	0.94	0.92	0.92	0.92	0.88	0.88	0.88
Shared Lane Traffic (%)												
Lane Group Flow (vph)	6	233	0	24	545	0	541	174	0	31	122	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12				12			12
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA		D.P+P	NA		Perm	NA	
Protected Phases		6			2		3 8	3 4 8				4
Permitted Phases	6			2			4					4
Detector Phase	6	6		2	2		3 8	3 4 8				4
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0					4.0	4.0	
Minimum Split (s)	11.5	11.5		11.5	11.5					9.5	9.5	
Total Split (s)	45.0	45.0		45.0	45.0					20.0	20.0	
Total Split (%)	40.2%	40.2%		40.2%	40.2%					17.9%	17.9%	
Maximum Green (s)	39.5	39.5		39.5	39.5					14.5	14.5	
Yellow Time (s)	3.5	3.5		3.5	3.5					3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0					2.0	2.0	

Lane Group	Ø3	Ø7	Ø8
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (ft)			
Storage Lanes			
Taper Length (ft)			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Enter Blocked Intersection			
Lane Alignment			
Median Width(ft)			
Link Offset(ft)			
Crosswalk Width(ft)			
Two way Left Turn Lane			
Headway Factor			
Turning Speed (mph)			
Number of Detectors			
Detector Template			
Leading Detector (ft)			
Trailing Detector (ft)			
Detector 1 Position(ft)			
Detector 1 Size(ft)			
Detector 1 Type			
Detector 1 Channel			
Detector 1 Extend (s)			
Detector 1 Queue (s)			
Detector 1 Delay (s)			
Turn Type			
Protected Phases	3	7	8
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	4.0	1.0	4.0
Minimum Split (s)	9.5	6.5	9.5
Total Split (s)	22.0	7.0	18.0
Total Split (%)	20%	6%	16%
Maximum Green (s)	16.5	1.5	12.5
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0

Lanes, Volumes, Timings

2: Route 257 & East Genesee Street

10/15/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	0.0	0.0		0.0	0.0					0.0	0.0	
Total Lost Time (s)	5.5	5.5		5.5	5.5					5.5	5.5	
Lead/Lag										Lag	Lag	
Lead-Lag Optimize?										Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0					2.0	2.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min					None	None	
Act Effect Green (s)	38.1	38.1		38.1	38.1		43.3	48.8		11.4	11.4	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.39	0.44		0.10	0.10	
v/c Ratio	0.07	0.37		0.07	0.87		0.88	0.22		0.25	0.64	
Control Delay	26.8	29.8		25.4	50.1		27.8	5.7		50.0	60.0	
Queue Delay	0.0	0.0		0.0	0.0		7.3	0.5		0.0	0.0	
Total Delay	26.8	29.8		25.4	50.1		35.1	6.2		50.0	60.0	
LOS	C	C		C	D		D	A		D	E	
Approach Delay		29.7			49.0			28.1			58.0	
Approach LOS		C			D			C			E	
Queue Length 50th (ft)	3	126		12	362		107	23		21	80	
Queue Length 95th (ft)	10	139		31	#540		#301	m31		49	136	
Internal Link Dist (ft)		288			1246			109			601	
Turn Bay Length (ft)	200			135						175		
Base Capacity (vph)	92	656		345	651		614	842		156	241	
Starvation Cap Reductn	0	0		0	0		50	377		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.07	0.36		0.07	0.84		0.96	0.37		0.20	0.51	

Intersection Summary

Area Type: Other

Cycle Length: 112

Actuated Cycle Length: 112

Offset: 17 (15%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 38.2

Intersection LOS: D

Intersection Capacity Utilization 70.7%

ICU Level of Service C

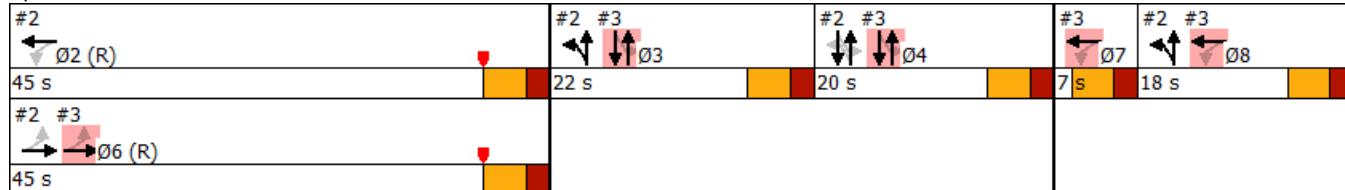
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Route 257 & East Genesee Street



Lane Group	Ø3	Ø7	Ø8
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0
Recall Mode	None	None	None
Act Effect Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			
Intersection Summary			

Lanes, Volumes, Timings
3: Route 257 & Salt Springs Road

10/15/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↔	↑	↑	↑	↑	↑	↑	↔
Traffic Volume (vph)	2	87	90	15	0	379	0	277	6	25	89	0
Future Volume (vph)	2	87	90	15	0	379	0	277	6	25	89	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230			0	0	0	0	0	0	0	0	0
Storage Lanes	1			0	0	0	0	0	0	0	0	0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1721		0	1617		0	0	1857	0	0	1842
Flt Permitted	0.105				0.981							0.780
Satd. Flow (perm)	196	1721		0	1590		0	0	1857	0	0	1453
Right Turn on Red			Yes				Yes			Yes		Yes
Satd. Flow (RTOR)		52				446				1		
Link Speed (mph)		30				30			30			30
Link Distance (ft)		438				1229			873			189
Travel Time (s)		10.0				27.9			19.8			4.3
Peak Hour Factor	0.81	0.81	0.81	0.85	0.85	0.85	0.80	0.80	0.80	0.74	0.74	0.74
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	218	0	0	464	0	0	354	0	0	154	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12				0			0
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1			1	1			1		1	1
Detector Template				Left							Left	
Leading Detector (ft)	50	50		20	50			50		20		50
Trailing Detector (ft)	0	0		0	0			0		0		0
Detector 1 Position(ft)	0	0		0	0			0		0		0
Detector 1 Size(ft)	50	50		20	50			50		20		50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			0.0		0.0		0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			0.0		0.0		0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			0.0		0.0		0.0
Turn Type	Perm	NA		Perm	NA			NA		Perm		NA
Protected Phases		6			7 8			3 4				3 4
Permitted Phases	6			7 8							3 4	
Detector Phase	6	6		7 8	7 8			3 4		3 4		3 4
Switch Phase												
Minimum Initial (s)	6.0	6.0										
Minimum Split (s)	11.5	11.5										
Total Split (s)	45.0	45.0										
Total Split (%)	40.2%	40.2%										
Maximum Green (s)	39.5	39.5										
Yellow Time (s)	3.5	3.5										
All-Red Time (s)	2.0	2.0										

Lane Group	Ø2	Ø3	Ø4	Ø7	Ø8
Lane Configurations					
Traffic Volume (vph)					
Future Volume (vph)					
Ideal Flow (vphpl)					
Storage Length (ft)					
Storage Lanes					
Taper Length (ft)					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Turn Type					
Protected Phases	2	3	4	7	8
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	6.0	4.0	4.0	1.0	4.0
Minimum Split (s)	11.5	9.5	9.5	6.5	9.5
Total Split (s)	45.0	22.0	20.0	7.0	18.0
Total Split (%)	40%	20%	18%	6%	16%
Maximum Green (s)	39.5	16.5	14.5	1.5	12.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0

Lanes, Volumes, Timings
3: Route 257 & Salt Springs Road

10/15/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	0.0	0.0										
Total Lost Time (s)	5.5	5.5										
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0										
Recall Mode	C-Min	C-Min										
Act Effect Green (s)	38.1	38.1		21.3			36.1			36.1		
Actuated g/C Ratio	0.34	0.34		0.19			0.32			0.32		
v/c Ratio	0.03	0.35		0.70			0.59			0.33		
Control Delay	25.5	22.5		11.2			36.4			18.7		
Queue Delay	0.0	0.0		1.2			0.4			1.7		
Total Delay	25.5	22.5		12.4			36.8			20.3		
LOS	C	C		B			D			C		
Approach Delay		22.5		12.4			36.8			20.3		
Approach LOS		C		B			D			C		
Queue Length 50th (ft)	1	87		11			212			39		
Queue Length 95th (ft)	6	128		82			264			61		
Internal Link Dist (ft)		358		1149			793			109		
Turn Bay Length (ft)	230											
Base Capacity (vph)	69	640		665			649			507		
Starvation Cap Reductn	0	0		0			0			219		
Spillback Cap Reductn	0	0		69			62			0		
Storage Cap Reductn	0	0		0			0			0		
Reduced v/c Ratio	0.03	0.34		0.78			0.60			0.53		

Intersection Summary

Area Type: Other

Cycle Length: 112

Actuated Cycle Length: 112

Offset: 17 (15%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 22.6

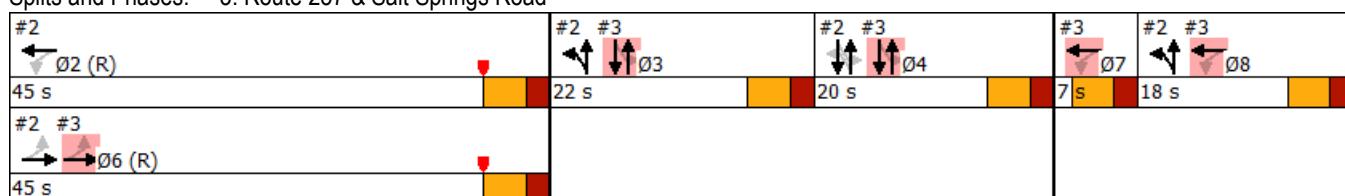
Intersection LOS: C

Intersection Capacity Utilization 72.3%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 3: Route 257 & Salt Springs Road



Lane Group	Ø2	Ø3	Ø4	Ø7	Ø8
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lead	Lag	Lead	Lag
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0
Recall Mode	C-Min	None	None	None	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Queue Length 50th (ft)					
Queue Length 95th (ft)					
Internal Link Dist (ft)					
Turn Bay Length (ft)					
Base Capacity (vph)					
Starvation Cap Reductn					
Spillback Cap Reductn					
Storage Cap Reductn					
Reduced v/c Ratio					
Intersection Summary					

Lanes, Volumes, Timings
4: Tracy Lumber & East Genesee Street

10/15/2019

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	1	2	3	4	5	6
Traffic Volume (vph)	194	3	0	489	2	2
Future Volume (vph)	194	3	0	489	2	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1859	0	0	1863	1694	0
Flt Permitted					0.976	
Satd. Flow (perm)	1859	0	0	1863	1694	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1326			205	132	
Travel Time (s)	30.1			4.7	3.0	
Peak Hour Factor	0.80	0.80	0.88	0.88	0.50	0.50
Shared Lane Traffic (%)						
Lane Group Flow (vph)	247	0	0	556	8	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 35.7%

ICU Level of Service A

Analysis Period (min) 15

Intersection

Int Delay, s/veh 0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	194	3	0	489	2	2
Future Vol, veh/h	194	3	0	489	2	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	88	88	50	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	243	4	0	556	4	4

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	247	0	801 245
Stage 1	-	-	-	-	245 -
Stage 2	-	-	-	-	556 -
Critical Hdwy	-	-	4.12	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	2.218	-	3.518 3.318
Pot Cap-1 Maneuver	-	-	1319	-	354 794
Stage 1	-	-	-	-	796 -
Stage 2	-	-	-	-	574 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1319	-	354 794
Mov Cap-2 Maneuver	-	-	-	-	354 -
Stage 1	-	-	-	-	796 -
Stage 2	-	-	-	-	574 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0	12.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	490	-	-	1319	-
HCM Lane V/C Ratio	0.016	-	-	-	-
HCM Control Delay (s)	12.5	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Lanes, Volumes, Timings

5: East Genesee Street & Existing Site Access

10/15/2019

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↑	
Traffic Volume (vph)	3	193	487	2	0	2
Future Volume (vph)	3	193	487	2	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1861	1863	0	1611	0
Flt Permitted	0.999					
Satd. Flow (perm)	0	1861	1863	0	1611	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		205	115		239	
Travel Time (s)		4.7	2.6		5.4	
Peak Hour Factor	0.80	0.80	0.88	0.88	0.50	0.50
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	245	555	0	4	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 35.8%

ICU Level of Service A

Analysis Period (min) 15

Intersection

Int Delay, s/veh 0.1

Movement EBL EBT WBT WBR SBL SBR

Lane Configurations		↖	↗	↘	↙
Traffic Vol, veh/h	3	193	487	2	0
Future Vol, veh/h	3	193	487	2	0
Conflicting Peds, #/hr	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop Stop
RT Channelized	-	None	-	None	- None
Storage Length	-	-	-	-	0 -
Veh in Median Storage, #	-	0	0	-	0 -
Grade, %	-	0	0	-	0 -
Peak Hour Factor	80	80	88	88	50 50
Heavy Vehicles, %	2	2	2	2	2 2
Mvmt Flow	4	241	553	2	0 4

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	555	0	-	0	803 554
Stage 1	-	-	-	-	554 -
Stage 2	-	-	-	-	249 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1015	-	-	-	353 532
Stage 1	-	-	-	-	575 -
Stage 2	-	-	-	-	792 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	1015	-	-	-	351 532
Mov Cap-2 Maneuver	-	-	-	-	351 -
Stage 1	-	-	-	-	572 -
Stage 2	-	-	-	-	792 -

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	11.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1015	-	-	-	532
HCM Lane V/C Ratio	0.004	-	-	-	0.008
HCM Control Delay (s)	8.6	0	-	-	11.8
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Lanes, Volumes, Timings

6: East Genesee Street & Post Office Exit Driveway

10/15/2019

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		Y	
Traffic Volume (vph)	0	193	462	0	11	27
Future Volume (vph)	0	193	462	0	11	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1863	1863	0	1660	0
Flt Permitted					0.986	
Satd. Flow (perm)	0	1863	1863	0	1660	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		115	1553		145	
Travel Time (s)		2.6	35.3		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.79	0.79
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	210	502	0	48	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 34.3%

ICU Level of Service A

Analysis Period (min) 15

Intersection

Int Delay, s/veh 0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	193	462	0	11	27
Future Vol, veh/h	0	193	462	0	11	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	79	79
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	210	502	0	14	34

Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	-	0	-	0	712	502
Stage 1	-	-	-	-	502	-
Stage 2	-	-	-	-	210	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	0	-	-	0	399	569
Stage 1	0	-	-	0	608	-
Stage 2	0	-	-	0	825	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	399	569
Mov Cap-2 Maneuver	-	-	-	-	399	-
Stage 1	-	-	-	-	608	-
Stage 2	-	-	-	-	825	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.8
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	507
HCM Lane V/C Ratio	-	-	0.095
HCM Control Delay (s)	-	-	12.8
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.3

Lanes, Volumes, Timings

1: Salt Springs Road & East Genesee Street

10/15/2019

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations	↑	↖		↑		
Traffic Volume (vph)	524	514	0	632	0	0
Future Volume (vph)	524	514	0	632	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		175	0		0	0
Storage Lanes		1	0		0	0
Taper Length (ft)			25		25	
Satd. Flow (prot)	1863	1583	0	1863	0	0
Flt Permitted						
Satd. Flow (perm)	1863	1583	0	1863	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1283			368	438	
Travel Time (s)	29.2			8.4	10.0	
Peak Hour Factor	0.94	0.94	0.93	0.93	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	557	547	0	680	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 36.6%

ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings

2: Route 257 & East Genesee Street

10/15/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑		↑	↑		↑	↑		↑	↑	
Traffic Volume (vph)	7	516	1	32	339	28	279	121	71	65	145	14
Future Volume (vph)	7	516	1	32	339	28	279	121	71	65	145	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	135		0	0		0	175		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1863	0	1770	1842	0	1770	1758	0	1770	1839	0
Flt Permitted	0.317			0.178			0.362			0.625		
Satd. Flow (perm)	590	1863	0	332	1842	0	674	1758	0	1164	1839	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					4				34			3
Link Speed (mph)		30				30			30			30
Link Distance (ft)		368				1326			189			681
Travel Time (s)		8.4				30.1			4.3			15.5
Peak Hour Factor	0.94	0.94	0.94	0.87	0.87	0.87	0.90	0.90	0.90	0.85	0.85	0.85
Shared Lane Traffic (%)												
Lane Group Flow (vph)	7	550	0	37	422	0	310	213	0	76	187	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12				12			12
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA		D.P+P	NA		Perm	NA	
Protected Phases		6			2		3 8	3 4 8				4
Permitted Phases	6			2			4				4	
Detector Phase	6	6		2	2		3 8	3 4 8			4	4
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0					4.0	4.0	
Minimum Split (s)	11.5	11.5		11.5	11.5					9.5	9.5	
Total Split (s)	45.0	45.0		45.0	45.0					20.0	20.0	
Total Split (%)	40.2%	40.2%		40.2%	40.2%					17.9%	17.9%	
Maximum Green (s)	39.5	39.5		39.5	39.5					14.5	14.5	
Yellow Time (s)	3.5	3.5		3.5	3.5					3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0					2.0	2.0	

Lane Group	Ø3	Ø7	Ø8
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (ft)			
Storage Lanes			
Taper Length (ft)			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Enter Blocked Intersection			
Lane Alignment			
Median Width(ft)			
Link Offset(ft)			
Crosswalk Width(ft)			
Two way Left Turn Lane			
Headway Factor			
Turning Speed (mph)			
Number of Detectors			
Detector Template			
Leading Detector (ft)			
Trailing Detector (ft)			
Detector 1 Position(ft)			
Detector 1 Size(ft)			
Detector 1 Type			
Detector 1 Channel			
Detector 1 Extend (s)			
Detector 1 Queue (s)			
Detector 1 Delay (s)			
Turn Type			
Protected Phases	3	7	8
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	4.0	1.0	4.0
Minimum Split (s)	9.5	6.5	9.5
Total Split (s)	22.0	7.0	18.0
Total Split (%)	20%	6%	16%
Maximum Green (s)	16.5	1.5	12.5
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0

Lanes, Volumes, Timings

2: Route 257 & East Genesee Street

10/15/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	0.0	0.0		0.0	0.0					0.0	0.0	
Total Lost Time (s)	5.5	5.5		5.5	5.5					5.5	5.5	
Lead/Lag										Lag	Lag	
Lead-Lag Optimize?										Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0					2.0	2.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min					None	None	
Act Effect Green (s)	41.6	41.6		41.6	41.6		40.8	46.3		13.6	13.6	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.36	0.41		0.12	0.12	
v/c Ratio	0.03	0.80		0.30	0.62		0.61	0.29		0.54	0.83	
Control Delay	23.6	41.8		33.8	33.4		13.2	3.7		60.7	75.9	
Queue Delay	0.0	0.0		108.4	0.0		0.7	0.4		0.0	2.7	
Total Delay	23.6	41.8		142.1	33.4		13.8	4.1		60.7	78.7	
LOS	C	D		F	C		B	A		E	E	
Approach Delay		41.5			42.1			9.9			73.5	
Approach LOS		D			D			A			E	
Queue Length 50th (ft)	3	347		19	241		41	16		52	130	
Queue Length 95th (ft)	14	#545		50	345		111	18		95	#220	
Internal Link Dist (ft)		288			1246			109			601	
Turn Bay Length (ft)	200			135						175		
Base Capacity (vph)	219	693		123	688		579	826		150	240	
Starvation Cap Reductn	0	0		0	0		78	287		0	0	
Spillback Cap Reductn	0	0		89	0		0	0		0	14	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.03	0.79		1.09	0.61		0.62	0.40		0.51	0.83	

Intersection Summary

Area Type: Other

Cycle Length: 112

Actuated Cycle Length: 112

Offset: 17 (15%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 37.2

Intersection LOS: D

Intersection Capacity Utilization 64.9%

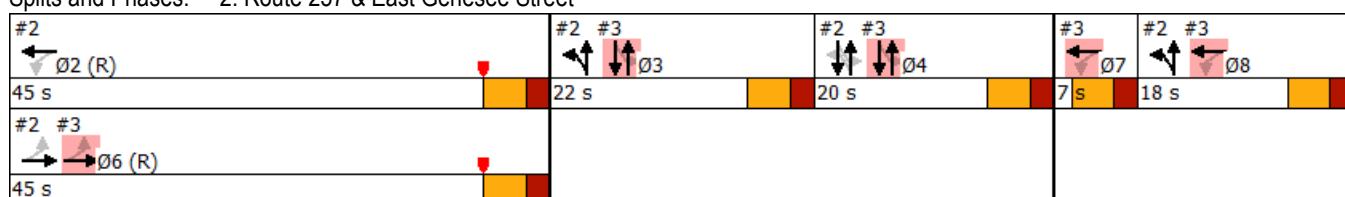
ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: Route 257 & East Genesee Street



Lane Group	Ø3	Ø7	Ø8
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0
Recall Mode	None	None	None
Act Effect Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			
Intersection Summary			

Lanes, Volumes, Timings
3: Route 257 & Salt Springs Road

10/15/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑			↔			↑			↔	
Traffic Volume (vph)	14	356	144	9	0	157	0	300	12	67	111	0
Future Volume (vph)	14	356	144	9	0	157	0	300	12	67	111	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230			0	0	0	0	0	0	0	0	0
Storage Lanes	1			0	0	0	0	0	0	0	0	0
Taper Length (ft)	25				25			25			25	
Satd. Flow (prot)	1770	1783	0	0	1619	0	0	1853	0	0	1829	0
Flt Permitted	0.096				0.955						0.499	
Satd. Flow (perm)	179	1783	0	0	1551	0	0	1853	0	0	930	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20				183			2			
Link Speed (mph)		30				30			30			30
Link Distance (ft)		438				1229			873			189
Travel Time (s)		10.0				27.9			19.8			4.3
Peak Hour Factor	0.95	0.95	0.95	0.86	0.86	0.86	0.82	0.82	0.82	0.75	0.75	0.75
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	527	0	0	193	0	0	381	0	0	237	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1			1	1			1		1	1
Detector Template				Left							Left	
Leading Detector (ft)	50	50			20	50			50		20	50
Trailing Detector (ft)	0	0			0	0			0		0	0
Detector 1 Position(ft)	0	0			0	0			0		0	0
Detector 1 Size(ft)	50	50			20	50			50		20	50
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Turn Type	Perm	NA			Perm	NA			NA		Perm	NA
Protected Phases		6				7 8			3 4			3 4
Permitted Phases	6				7 8						3 4	
Detector Phase	6	6			7 8	7 8			3 4		3 4	3 4
Switch Phase												
Minimum Initial (s)	6.0	6.0										
Minimum Split (s)	11.5	11.5										
Total Split (s)	45.0	45.0										
Total Split (%)	40.2%	40.2%										
Maximum Green (s)	39.5	39.5										
Yellow Time (s)	3.5	3.5										
All-Red Time (s)	2.0	2.0										

Lane Group	Ø2	Ø3	Ø4	Ø7	Ø8
Lane Configurations					
Traffic Volume (vph)					
Future Volume (vph)					
Ideal Flow (vphpl)					
Storage Length (ft)					
Storage Lanes					
Taper Length (ft)					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Turn Type					
Protected Phases	2	3	4	7	8
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	6.0	4.0	4.0	1.0	4.0
Minimum Split (s)	11.5	9.5	9.5	6.5	9.5
Total Split (s)	45.0	22.0	20.0	7.0	18.0
Total Split (%)	40%	20%	18%	6%	16%
Maximum Green (s)	39.5	16.5	14.5	1.5	12.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0

Lanes, Volumes, Timings
3: Route 257 & Salt Springs Road

10/15/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	0.0	0.0										
Total Lost Time (s)	5.5	5.5										
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0										
Recall Mode	C-Min	C-Min										
Act Effect Green (s)	41.6	41.6		15.8			38.1				38.1	
Actuated g/C Ratio	0.37	0.37		0.14			0.34				0.34	
v/c Ratio	0.23	0.78		0.51			0.60				0.75	
Control Delay	35.4	39.9		12.4			35.5				56.8	
Queue Delay	0.0	0.0		0.1			0.0				49.9	
Total Delay	35.4	39.9		12.6			35.5				106.6	
LOS	D	D		B			D				F	
Approach Delay		39.7		12.6			35.5				106.6	
Approach LOS		D		B			D				F	
Queue Length 50th (ft)	7	319		6			220				115	
Queue Length 95th (ft)	29	#510		61			296				155	
Internal Link Dist (ft)		358		1149			793				109	
Turn Bay Length (ft)	230											
Base Capacity (vph)	66	675		428			646				323	
Starvation Cap Reductn	0	0		0			0				102	
Spillback Cap Reductn	0	0		18			0				0	
Storage Cap Reductn	0	0		0			0				0	
Reduced v/c Ratio	0.23	0.78		0.47			0.59				1.07	

Intersection Summary

Area Type: Other

Cycle Length: 112

Actuated Cycle Length: 112

Offset: 17 (15%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 46.4

Intersection LOS: D

Intersection Capacity Utilization 67.3%

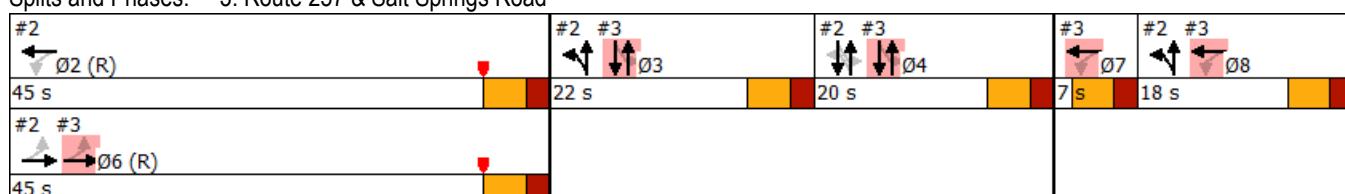
ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: Route 257 & Salt Springs Road



Lane Group	Ø2	Ø3	Ø4	Ø7	Ø8
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lead	Lag	Lead	Lag
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0
Recall Mode	C-Min	None	None	None	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Queue Length 50th (ft)					
Queue Length 95th (ft)					
Internal Link Dist (ft)					
Turn Bay Length (ft)					
Base Capacity (vph)					
Starvation Cap Reductn					
Spillback Cap Reductn					
Storage Cap Reductn					
Reduced v/c Ratio					
Intersection Summary					

Lanes, Volumes, Timings
4: Tracy Lumber & East Genesee Street

10/15/2019

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	1		4	3	2	
Traffic Volume (vph)	602	0	0	292	0	1
Future Volume (vph)	602	0	0	292	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1863	0	0	1863	1611	0
Flt Permitted						
Satd. Flow (perm)	1863	0	0	1863	1611	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1326			205	132	
Travel Time (s)	30.1			4.7	3.0	
Peak Hour Factor	0.92	0.92	0.84	0.84	0.50	0.50
Shared Lane Traffic (%)						
Lane Group Flow (vph)	654	0	0	348	2	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 41.7%

ICU Level of Service A

Analysis Period (min) 15

Intersection

Int Delay, s/veh

0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑		↔	↔		
Traffic Vol, veh/h	602	0	0	292	0	1
Future Vol, veh/h	602	0	0	292	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	84	84	50	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	654	0	0	348	0	2

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	654	0	1002 654
Stage 1	-	-	-	-	654 -
Stage 2	-	-	-	-	348 -
Critical Hdwy	-	-	4.12	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	2.218	-	3.518 3.318
Pot Cap-1 Maneuver	-	-	933	-	269 467
Stage 1	-	-	-	-	517 -
Stage 2	-	-	-	-	715 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	933	-	269 467
Mov Cap-2 Maneuver	-	-	-	-	269 -
Stage 1	-	-	-	-	517 -
Stage 2	-	-	-	-	715 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0	12.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	467	-	-	933	-
HCM Lane V/C Ratio	0.004	-	-	-	-
HCM Control Delay (s)	12.7	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Lanes, Volumes, Timings

5: East Genesee Street & Existing Site Access

10/15/2019

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↑	
Traffic Volume (vph)	1	602	290	0	1	2
Future Volume (vph)	1	602	290	0	1	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1863	1863	0	1655	0
Flt Permitted					0.988	
Satd. Flow (perm)	0	1863	1863	0	1655	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		205	115		239	
Travel Time (s)		4.7	2.6		5.4	
Peak Hour Factor	0.92	0.92	0.84	0.84	0.75	0.75
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	655	345	0	4	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 42.5%

ICU Level of Service A

Analysis Period (min) 15

Intersection

Int Delay, s/veh 0.1

Movement EBL EBT WBT WBR SBL SBR

Lane Configurations

Traffic Vol, veh/h	1	602	290	0	1	2
Future Vol, veh/h	1	602	290	0	1	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	84	84	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	654	345	0	1	3

Major/Minor Major1 Major2 Minor2

Conflicting Flow All	345	0	-	0	1001	345
Stage 1	-	-	-	-	345	-
Stage 2	-	-	-	-	656	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1214	-	-	-	269	698
Stage 1	-	-	-	-	717	-
Stage 2	-	-	-	-	516	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1214	-	-	-	269	698
Mov Cap-2 Maneuver	-	-	-	-	269	-
Stage 1	-	-	-	-	716	-
Stage 2	-	-	-	-	516	-

Approach EB WB SB

HCM Control Delay, s	0	0	13
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1214	-	-	-	456
HCM Lane V/C Ratio	0.001	-	-	-	0.009
HCM Control Delay (s)	8	0	-	-	13
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Lanes, Volumes, Timings

6: East Genesee Street & Post Office Exit Driveway

10/15/2019

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		Y	
Traffic Volume (vph)	0	603	261	0	30	29
Future Volume (vph)	0	603	261	0	30	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1863	1863	0	1696	0
Flt Permitted					0.975	
Satd. Flow (perm)	0	1863	1863	0	1696	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		115	1553		145	
Travel Time (s)		2.6	35.3		3.3	
Peak Hour Factor	0.92	0.92	0.84	0.84	0.67	0.67
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	655	311	0	88	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 41.8%

ICU Level of Service A

Analysis Period (min) 15

Intersection

Int Delay, s/veh 1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
----------	-----	-----	-----	-----	-----	-----

Lane Configurations		↑	↑		↖	
Traffic Vol, veh/h	0	603	261	0	30	29
Future Vol, veh/h	0	603	261	0	30	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	84	84	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	655	311	0	45	43

Major/Minor	Major1	Major2	Minor2
-------------	--------	--------	--------

Conflicting Flow All	-	0	-	0	966	311
Stage 1	-	-	-	-	311	-
Stage 2	-	-	-	-	655	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	0	-	-	0	282	729
Stage 1	0	-	-	0	743	-
Stage 2	0	-	-	0	517	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	282	729
Mov Cap-2 Maneuver	-	-	-	-	282	-
Stage 1	-	-	-	-	743	-
Stage 2	-	-	-	-	517	-

Approach	EB	WB	SB
----------	----	----	----

HCM Control Delay, s	0	0	16.4
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
-----------------------	-----	-----	-------

Capacity (veh/h)	-	-	404
HCM Lane V/C Ratio	-	-	0.218
HCM Control Delay (s)	-	-	16.4
HCM Lane LOS	-	-	C
HCM 95th %tile Q(veh)	-	-	0.8

Lanes, Volumes, Timings

1: Salt Springs Road & East Genesee Street

10/15/2019

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations	↑	↖		↑		
Traffic Volume (vph)	167	181	0	638	0	0
Future Volume (vph)	167	181	0	638	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		175	0		0	0
Storage Lanes		1	0		0	0
Taper Length (ft)			25		25	
Satd. Flow (prot)	1863	1583	0	1863	0	0
Flt Permitted						
Satd. Flow (perm)	1863	1583	0	1863	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1283			368	438	
Travel Time (s)	29.2			8.4	10.0	
Peak Hour Factor	0.80	0.80	0.98	0.98	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	209	226	0	651	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 36.9%

ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings

2: Route 257 & East Genesee Street

10/15/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑		↑	↑		↑	↑		↑	↑	
Traffic Volume (vph)	4	162	1	23	473	44	503	121	41	27	91	18
Future Volume (vph)	4	162	1	23	473	44	503	121	41	27	91	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	135		0	0		0	175		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1861	0	1770	1839	0	1770	1792	0	1770	1818	0
Flt Permitted	0.132			0.521			0.568			0.646		
Satd. Flow (perm)	246	1861	0	970	1839	0	1058	1792	0	1203	1818	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					5				19			7
Link Speed (mph)		30			30				30			30
Link Distance (ft)		368			1326				189			681
Travel Time (s)		8.4			30.1				4.3			15.5
Peak Hour Factor	0.69	0.69	0.69	0.94	0.94	0.94	0.92	0.92	0.92	0.88	0.88	0.88
Shared Lane Traffic (%)												
Lane Group Flow (vph)	6	236	0	24	550	0	547	177	0	31	123	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12				12			12
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA		D.P+P	NA		Perm	NA	
Protected Phases		6			2		3 8	3 4 8				4
Permitted Phases	6			2			4					4
Detector Phase	6	6		2	2		3 8	3 4 8				4
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0					4.0	4.0	
Minimum Split (s)	11.5	11.5		11.5	11.5					9.5	9.5	
Total Split (s)	45.0	45.0		45.0	45.0					20.0	20.0	
Total Split (%)	40.2%	40.2%		40.2%	40.2%					17.9%	17.9%	
Maximum Green (s)	39.5	39.5		39.5	39.5					14.5	14.5	
Yellow Time (s)	3.5	3.5		3.5	3.5					3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0					2.0	2.0	

Lane Group	Ø3	Ø7	Ø8
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (ft)			
Storage Lanes			
Taper Length (ft)			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Enter Blocked Intersection			
Lane Alignment			
Median Width(ft)			
Link Offset(ft)			
Crosswalk Width(ft)			
Two way Left Turn Lane			
Headway Factor			
Turning Speed (mph)			
Number of Detectors			
Detector Template			
Leading Detector (ft)			
Trailing Detector (ft)			
Detector 1 Position(ft)			
Detector 1 Size(ft)			
Detector 1 Type			
Detector 1 Channel			
Detector 1 Extend (s)			
Detector 1 Queue (s)			
Detector 1 Delay (s)			
Turn Type			
Protected Phases	3	7	8
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	4.0	1.0	4.0
Minimum Split (s)	9.5	6.5	9.5
Total Split (s)	22.0	7.0	18.0
Total Split (%)	20%	6%	16%
Maximum Green (s)	16.5	1.5	12.5
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0

Lanes, Volumes, Timings

2: Route 257 & East Genesee Street

10/15/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	0.0	0.0		0.0	0.0					0.0	0.0	
Total Lost Time (s)	5.5	5.5		5.5	5.5					5.5	5.5	
Lead/Lag										Lag	Lag	
Lead-Lag Optimize?										Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0					2.0	2.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min					None	None	
Act Effect Green (s)	37.9	37.9		37.9	37.9		43.4	48.9		11.5	11.5	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.39	0.44		0.10	0.10	
v/c Ratio	0.07	0.37		0.07	0.88		0.89	0.22		0.25	0.64	
Control Delay	27.2	29.9		25.4	51.3		28.9	5.8		50.0	60.2	
Queue Delay	0.0	0.0		0.0	0.0		8.1	0.5		0.0	0.0	
Total Delay	27.2	29.9		25.4	51.3		37.0	6.3		50.0	60.2	
LOS	C	C		C	D		D	A		D	E	
Approach Delay		29.9			50.3			29.5			58.1	
Approach LOS		C			D			C			E	
Queue Length 50th (ft)	3	127		12	365		109	24		21	81	
Queue Length 95th (ft)	10	141		31	#548		#311	m32		49	137	
Internal Link Dist (ft)		288			1246			109			601	
Turn Bay Length (ft)	200			135							175	
Base Capacity (vph)	86	656		342	651		614	842		155	241	
Starvation Cap Reductn	0	0		0	0		49	374		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.07	0.36		0.07	0.84		0.97	0.38		0.20	0.51	

Intersection Summary

Area Type: Other

Cycle Length: 112

Actuated Cycle Length: 112

Offset: 17 (15%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 39.2

Intersection LOS: D

Intersection Capacity Utilization 71.3%

ICU Level of Service C

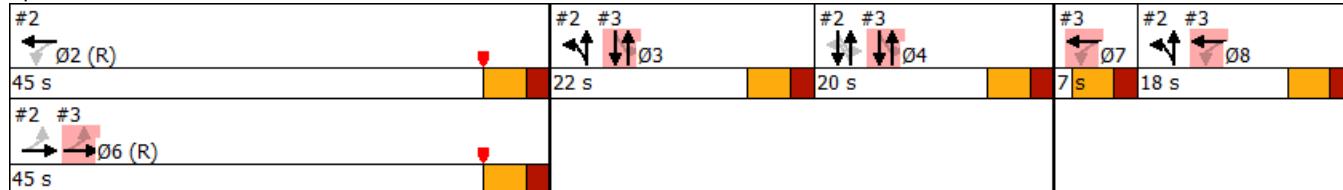
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Route 257 & East Genesee Street



Lane Group	Ø3	Ø7	Ø8
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0
Recall Mode	None	None	None
Act Effect Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			
Intersection Summary			

Lanes, Volumes, Timings
3: Route 257 & Salt Springs Road

10/15/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↔	↑	↑	↑	↑	↑	↑	↔
Traffic Volume (vph)	2	88	91	15	0	383	0	280	6	25	90	0
Future Volume (vph)	2	88	91	15	0	383	0	280	6	25	90	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230			0	0	0	0	0	0	0	0	0
Storage Lanes	1			0	0	0	0	0	0	0	0	0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1721		0	1617		0	0	1857	0	0	1842
Flt Permitted	0.105				0.981							0.776
Satd. Flow (perm)	196	1721		0	1590		0	0	1857	0	0	1445
Right Turn on Red			Yes				Yes			Yes		Yes
Satd. Flow (RTOR)		51				451				1		
Link Speed (mph)		30				30			30			30
Link Distance (ft)		438				1229			873			189
Travel Time (s)		10.0				27.9			19.8			4.3
Peak Hour Factor	0.81	0.81	0.81	0.85	0.85	0.85	0.80	0.80	0.80	0.74	0.74	0.74
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	221	0	0	469	0	0	358	0	0	156	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1			1	1			1		1	1
Detector Template				Left							Left	
Leading Detector (ft)	50	50			20	50			50		20	50
Trailing Detector (ft)	0	0			0	0			0		0	0
Detector 1 Position(ft)	0	0			0	0			0		0	0
Detector 1 Size(ft)	50	50			20	50			50		20	50
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Turn Type	Perm	NA			Perm	NA			NA		Perm	NA
Protected Phases		6				7 8			3 4			3 4
Permitted Phases	6				7 8						3 4	
Detector Phase	6	6			7 8	7 8			3 4		3 4	3 4
Switch Phase												
Minimum Initial (s)	6.0	6.0										
Minimum Split (s)	11.5	11.5										
Total Split (s)	45.0	45.0										
Total Split (%)	40.2%	40.2%										
Maximum Green (s)	39.5	39.5										
Yellow Time (s)	3.5	3.5										
All-Red Time (s)	2.0	2.0										

Lane Group	Ø2	Ø3	Ø4	Ø7	Ø8
Lane Configurations					
Traffic Volume (vph)					
Future Volume (vph)					
Ideal Flow (vphpl)					
Storage Length (ft)					
Storage Lanes					
Taper Length (ft)					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Turn Type					
Protected Phases	2	3	4	7	8
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	6.0	4.0	4.0	1.0	4.0
Minimum Split (s)	11.5	9.5	9.5	6.5	9.5
Total Split (s)	45.0	22.0	20.0	7.0	18.0
Total Split (%)	40%	20%	18%	6%	16%
Maximum Green (s)	39.5	16.5	14.5	1.5	12.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0

Lanes, Volumes, Timings
3: Route 257 & Salt Springs Road

10/15/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	0.0	0.0										
Total Lost Time (s)	5.5	5.5										
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0										
Recall Mode	C-Min	C-Min										
Act Effect Green (s)	37.9	37.9		21.5			36.1			36.1		
Actuated g/C Ratio	0.34	0.34		0.19			0.32			0.32		
v/c Ratio	0.03	0.36		0.70			0.60			0.34		
Control Delay	25.5	22.8		11.1			36.7			18.9		
Queue Delay	0.0	0.0		2.1			0.5			1.6		
Total Delay	25.5	22.8		13.2			37.2			20.5		
LOS	C	C		B			D			C		
Approach Delay		22.8		13.2			37.2			20.5		
Approach LOS		C		B			D			C		
Queue Length 50th (ft)	1	89		11			217			40		
Queue Length 95th (ft)	6	132		82			267			62		
Internal Link Dist (ft)		358		1149			793			109		
Turn Bay Length (ft)	230											
Base Capacity (vph)	69	639		670			649			504		
Starvation Cap Reductn	0	0		0			0			213		
Spillback Cap Reductn	0	0		94			74			0		
Storage Cap Reductn	0	0		0			0			0		
Reduced v/c Ratio	0.03	0.35		0.81			0.62			0.54		

Intersection Summary

Area Type: Other

Cycle Length: 112

Actuated Cycle Length: 112

Offset: 17 (15%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 23.1

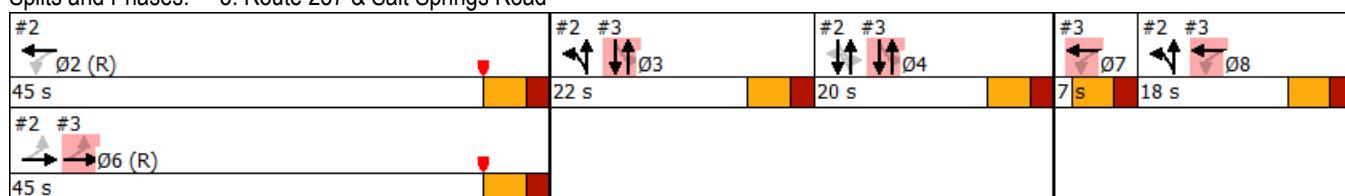
Intersection LOS: C

Intersection Capacity Utilization 72.7%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 3: Route 257 & Salt Springs Road



Lane Group	Ø2	Ø3	Ø4	Ø7	Ø8
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lead	Lag	Lead	Lag
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0
Recall Mode	C-Min	None	None	None	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Queue Length 50th (ft)					
Queue Length 95th (ft)					
Internal Link Dist (ft)					
Turn Bay Length (ft)					
Base Capacity (vph)					
Starvation Cap Reductn					
Spillback Cap Reductn					
Storage Cap Reductn					
Reduced v/c Ratio					
Intersection Summary					

Lanes, Volumes, Timings
4: Tracy Lumber & East Genesee Street

10/15/2019

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	1	1	1	1	1	1
Traffic Volume (vph)	196	3	0	494	2	2
Future Volume (vph)	196	3	0	494	2	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1859	0	0	1863	1694	0
Flt Permitted					0.976	
Satd. Flow (perm)	1859	0	0	1863	1694	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1326			205	132	
Travel Time (s)	30.1			4.7	3.0	
Peak Hour Factor	0.80	0.80	0.88	0.88	0.50	0.50
Shared Lane Traffic (%)						
Lane Group Flow (vph)	249	0	0	561	8	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 36.0%

ICU Level of Service A

Analysis Period (min) 15

Intersection

Int Delay, s/veh 0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑		↑	↑		
Traffic Vol, veh/h	196	3	0	494	2	2
Future Vol, veh/h	196	3	0	494	2	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	88	88	50	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	245	4	0	561	4	4

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	249	0	808 247
Stage 1	-	-	-	-	247 -
Stage 2	-	-	-	-	561 -
Critical Hdwy	-	-	4.12	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	2.218	-	3.518 3.318
Pot Cap-1 Maneuver	-	-	1317	-	350 792
Stage 1	-	-	-	-	794 -
Stage 2	-	-	-	-	571 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1317	-	350 792
Mov Cap-2 Maneuver	-	-	-	-	350 -
Stage 1	-	-	-	-	794 -
Stage 2	-	-	-	-	571 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0	12.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	485	-	-	1317	-
HCM Lane V/C Ratio	0.016	-	-	-	-
HCM Control Delay (s)	12.5	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Lanes, Volumes, Timings

5: East Genesee Street & Existing Site Access

10/15/2019

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↑	
Traffic Volume (vph)	3	195	492	2	0	2
Future Volume (vph)	3	195	492	2	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1861	1863	0	1611	0
Flt Permitted		0.999				
Satd. Flow (perm)	0	1861	1863	0	1611	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		205	115		239	
Travel Time (s)		4.7	2.6		5.4	
Peak Hour Factor	0.80	0.80	0.88	0.88	0.50	0.50
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	248	561	0	4	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 36.0%

ICU Level of Service A

Analysis Period (min) 15

Intersection

Int Delay, s/veh 0.1

Movement EBL EBT WBT WBR SBL SBR

Lane Configurations		↑	↗	↙	↘
Traffic Vol, veh/h	3	195	492	2	0
Future Vol, veh/h	3	195	492	2	0
Conflicting Peds, #/hr	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop Stop
RT Channelized	-	None	-	None	- None
Storage Length	-	-	-	-	0 -
Veh in Median Storage, #	-	0	0	-	0 -
Grade, %	-	0	0	-	0 -
Peak Hour Factor	80	80	88	88	50 50
Heavy Vehicles, %	2	2	2	2	2 2
Mvmt Flow	4	244	559	2	0 4

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	561	0	-	0	812 560
Stage 1	-	-	-	-	560 -
Stage 2	-	-	-	-	252 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1010	-	-	-	348 528
Stage 1	-	-	-	-	572 -
Stage 2	-	-	-	-	790 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	1010	-	-	-	346 528
Mov Cap-2 Maneuver	-	-	-	-	346 -
Stage 1	-	-	-	-	569 -
Stage 2	-	-	-	-	790 -

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	11.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1010	-	-	-	528
HCM Lane V/C Ratio	0.004	-	-	-	0.008
HCM Control Delay (s)	8.6	0	-	-	11.9
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Lanes, Volumes, Timings

6: East Genesee Street & Post Office Exit Driveway

10/15/2019

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		Y	
Traffic Volume (vph)	0	195	467	0	11	27
Future Volume (vph)	0	195	467	0	11	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1863	1863	0	1660	0
Flt Permitted					0.986	
Satd. Flow (perm)	0	1863	1863	0	1660	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		115	1553		145	
Travel Time (s)		2.6	35.3		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.79	0.79
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	212	508	0	48	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 34.6%

ICU Level of Service A

Analysis Period (min) 15

Intersection

Int Delay, s/veh 0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
----------	-----	-----	-----	-----	-----	-----

Lane Configurations						
Traffic Vol, veh/h	0	195	467	0	11	27
Future Vol, veh/h	0	195	467	0	11	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	79	79
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	212	508	0	14	34

Major/Minor	Major1	Major2	Minor2
-------------	--------	--------	--------

Conflicting Flow All	-	0	-	0	720	508
Stage 1	-	-	-	-	508	-
Stage 2	-	-	-	-	212	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	0	-	-	0	395	565
Stage 1	0	-	-	0	604	-
Stage 2	0	-	-	0	823	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	395	565
Mov Cap-2 Maneuver	-	-	-	-	395	-
Stage 1	-	-	-	-	604	-
Stage 2	-	-	-	-	823	-

Approach	EB	WB	SB
----------	----	----	----

HCM Control Delay, s	0	0	12.9
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
-----------------------	-----	-----	-------

Capacity (veh/h)	-	-	502
HCM Lane V/C Ratio	-	-	0.096
HCM Control Delay (s)	-	-	12.9
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.3

Lanes, Volumes, Timings

1: Salt Springs Road & East Genesee Street

10/15/2019

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations	↑	↖		↑		
Traffic Volume (vph)	529	519	0	638	0	0
Future Volume (vph)	529	519	0	638	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		175	0		0	0
Storage Lanes		1	0		0	0
Taper Length (ft)			25		25	
Satd. Flow (prot)	1863	1583	0	1863	0	0
Flt Permitted						
Satd. Flow (perm)	1863	1583	0	1863	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1283			368	438	
Travel Time (s)	29.2			8.4	10.0	
Peak Hour Factor	0.94	0.94	0.93	0.93	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	563	552	0	686	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 36.9%

ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings

2: Route 257 & East Genesee Street

10/15/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑		↑	↑		↑	↑		↑	↑	
Traffic Volume (vph)	7	521	1	32	342	28	282	122	72	66	147	14
Future Volume (vph)	7	521	1	32	342	28	282	122	72	66	147	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	135		0	0		0	175		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1863	0	1770	1842	0	1770	1758	0	1770	1839	0
Flt Permitted	0.312			0.170			0.355			0.623		
Satd. Flow (perm)	581	1863	0	317	1842	0	661	1758	0	1160	1839	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					4				34			3
Link Speed (mph)		30			30				30			30
Link Distance (ft)		368			1326				189			681
Travel Time (s)		8.4			30.1				4.3			15.5
Peak Hour Factor	0.94	0.94	0.94	0.87	0.87	0.87	0.90	0.90	0.90	0.85	0.85	0.85
Shared Lane Traffic (%)												
Lane Group Flow (vph)	7	555	0	37	425	0	313	216	0	78	189	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12				12			12
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA		D.P+P	NA		Perm	NA	
Protected Phases		6			2		3 8	3 4 8				4
Permitted Phases	6			2			4				4	
Detector Phase	6	6		2	2		3 8	3 4 8			4	4
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0					4.0	4.0	
Minimum Split (s)	11.5	11.5		11.5	11.5					9.5	9.5	
Total Split (s)	45.0	45.0		45.0	45.0					20.0	20.0	
Total Split (%)	40.2%	40.2%		40.2%	40.2%					17.9%	17.9%	
Maximum Green (s)	39.5	39.5		39.5	39.5					14.5	14.5	
Yellow Time (s)	3.5	3.5		3.5	3.5					3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0					2.0	2.0	

Lane Group	Ø3	Ø7	Ø8
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (ft)			
Storage Lanes			
Taper Length (ft)			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Enter Blocked Intersection			
Lane Alignment			
Median Width(ft)			
Link Offset(ft)			
Crosswalk Width(ft)			
Two way Left Turn Lane			
Headway Factor			
Turning Speed (mph)			
Number of Detectors			
Detector Template			
Leading Detector (ft)			
Trailing Detector (ft)			
Detector 1 Position(ft)			
Detector 1 Size(ft)			
Detector 1 Type			
Detector 1 Channel			
Detector 1 Extend (s)			
Detector 1 Queue (s)			
Detector 1 Delay (s)			
Turn Type			
Protected Phases	3	7	8
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	4.0	1.0	4.0
Minimum Split (s)	9.5	6.5	9.5
Total Split (s)	22.0	7.0	18.0
Total Split (%)	20%	6%	16%
Maximum Green (s)	16.5	1.5	12.5
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0

Lanes, Volumes, Timings

2: Route 257 & East Genesee Street

10/15/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	0.0	0.0		0.0	0.0					0.0	0.0	
Total Lost Time (s)	5.5	5.5		5.5	5.5					5.5	5.5	
Lead/Lag										Lag	Lag	
Lead-Lag Optimize?										Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0					2.0	2.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min					None	None	
Act Effect Green (s)	41.3	41.3		41.3	41.3		41.1	46.6		13.6	13.6	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.37	0.42		0.12	0.12	
v/c Ratio	0.03	0.81		0.32	0.62		0.61	0.29		0.55	0.84	
Control Delay	23.6	42.6		34.8	33.7		13.4	3.7		61.5	76.9	
Queue Delay	0.0	0.0		144.3	0.0		0.7	0.4		0.0	3.2	
Total Delay	23.6	42.6		179.2	33.7		14.0	4.1		61.5	80.1	
LOS	C	D		F	C		B	A		E	F	
Approach Delay		42.4			45.3			10.0			74.7	
Approach LOS		D			D			A			E	
Queue Length 50th (ft)	3	351		19	242		41	16		53	132	
Queue Length 95th (ft)	14	#555		51	348		117	18		98	#222	
Internal Link Dist (ft)		288			1246			109			601	
Turn Bay Length (ft)	200			135							175	
Base Capacity (vph)	214	688		117	683		581	829		150	240	
Starvation Cap Reductn	0	0		0	0		77	284		0	0	
Spillback Cap Reductn	0	0		99	0		0	0		0	15	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.03	0.81		2.06	0.62		0.62	0.40		0.52	0.84	

Intersection Summary

Area Type: Other

Cycle Length: 112

Actuated Cycle Length: 112

Offset: 17 (15%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 38.4

Intersection LOS: D

Intersection Capacity Utilization 65.4%

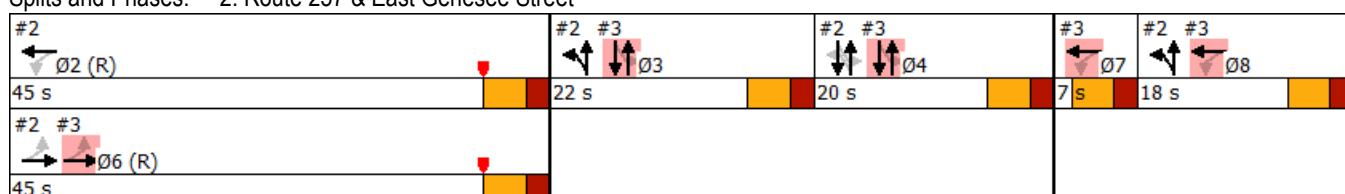
ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: Route 257 & East Genesee Street



Lane Group	Ø3	Ø7	Ø8
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0
Recall Mode	None	None	None
Act Effect Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			
Intersection Summary			

Lanes, Volumes, Timings
3: Route 257 & Salt Springs Road

10/15/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↔	↑	↑	↑	↑	↑	↔	↑
Traffic Volume (vph)	14	360	145	9	0	159	0	303	12	68	112	0
Future Volume (vph)	14	360	145	9	0	159	0	303	12	68	112	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230			0	0	0	0	0	0	0	0	0
Storage Lanes	1			0	0	0	0	0	0	0	0	0
Taper Length (ft)	25				25			25			25	
Satd. Flow (prot)	1770	1783	0	0	1619	0	0	1853	0	0	1827	0
Flt Permitted	0.097				0.955						0.491	
Satd. Flow (perm)	181	1783	0	0	1551	0	0	1853	0	0	915	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20				185			2			
Link Speed (mph)		30				30			30			30
Link Distance (ft)		438				1229			873			189
Travel Time (s)		10.0				27.9			19.8			4.3
Peak Hour Factor	0.95	0.95	0.95	0.86	0.86	0.86	0.82	0.82	0.82	0.75	0.75	0.75
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	532	0	0	195	0	0	385	0	0	240	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1			1	1			1		1	1
Detector Template				Left							Left	
Leading Detector (ft)	50	50			20	50			50		20	50
Trailing Detector (ft)	0	0			0	0			0		0	0
Detector 1 Position(ft)	0	0			0	0			0		0	0
Detector 1 Size(ft)	50	50			20	50			50		20	50
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Turn Type	Perm	NA			Perm	NA			NA		Perm	NA
Protected Phases		6				7 8			3 4			3 4
Permitted Phases	6				7 8						3 4	
Detector Phase	6	6			7 8	7 8			3 4		3 4	3 4
Switch Phase												
Minimum Initial (s)	6.0	6.0										
Minimum Split (s)	11.5	11.5										
Total Split (s)	45.0	45.0										
Total Split (%)	40.2%	40.2%										
Maximum Green (s)	39.5	39.5										
Yellow Time (s)	3.5	3.5										
All-Red Time (s)	2.0	2.0										

Lane Group	Ø2	Ø3	Ø4	Ø7	Ø8
Lane Configurations					
Traffic Volume (vph)					
Future Volume (vph)					
Ideal Flow (vphpl)					
Storage Length (ft)					
Storage Lanes					
Taper Length (ft)					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Turn Type					
Protected Phases	2	3	4	7	8
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	6.0	4.0	4.0	1.0	4.0
Minimum Split (s)	11.5	9.5	9.5	6.5	9.5
Total Split (s)	45.0	22.0	20.0	7.0	18.0
Total Split (%)	40%	20%	18%	6%	16%
Maximum Green (s)	39.5	16.5	14.5	1.5	12.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0

Lanes, Volumes, Timings
3: Route 257 & Salt Springs Road

10/15/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	0.0	0.0										
Total Lost Time (s)	5.5	5.5										
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0										
Recall Mode	C-Min	C-Min										
Act Effect Green (s)	41.3	41.3										38.3
Actuated g/C Ratio	0.37	0.37										0.34
v/c Ratio	0.23	0.79										0.77
Control Delay	35.3	40.6										58.5
Queue Delay	0.0	0.0										48.9
Total Delay	35.3	40.6										107.5
LOS	D	D										F
Approach Delay		40.5										107.5
Approach LOS		D										F
Queue Length 50th (ft)	7	322										120
Queue Length 95th (ft)	29	#518										158
Internal Link Dist (ft)		358										109
Turn Bay Length (ft)	230											
Base Capacity (vph)	66	671										320
Starvation Cap Reductn	0	0										96
Spillback Cap Reductn	0	0										0
Storage Cap Reductn	0	0										0
Reduced v/c Ratio	0.23	0.79										1.07

Intersection Summary

Area Type: Other

Cycle Length: 112

Actuated Cycle Length: 112

Offset: 17 (15%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 46.9

Intersection LOS: D

Intersection Capacity Utilization 67.9%

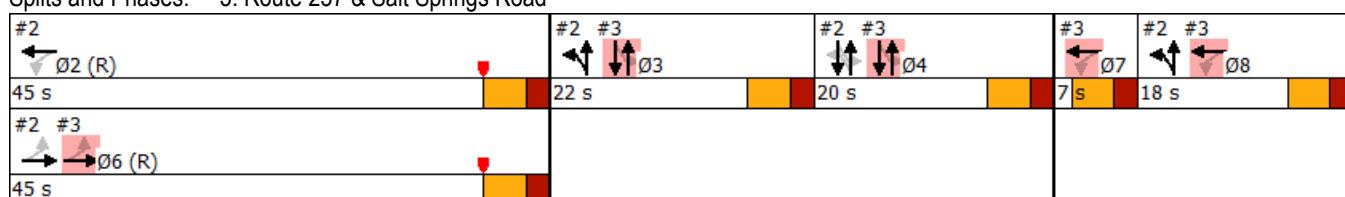
ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: Route 257 & Salt Springs Road



Lane Group	Ø2	Ø3	Ø4	Ø7	Ø8
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lead	Lag	Lead	Lag
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0
Recall Mode	C-Min	None	None	None	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Queue Length 50th (ft)					
Queue Length 95th (ft)					
Internal Link Dist (ft)					
Turn Bay Length (ft)					
Base Capacity (vph)					
Starvation Cap Reductn					
Spillback Cap Reductn					
Storage Cap Reductn					
Reduced v/c Ratio					
Intersection Summary					

Lanes, Volumes, Timings
4: Tracy Lumber & East Genesee Street

10/15/2019

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	1			4	2	
Traffic Volume (vph)	608	0	0	295	0	1
Future Volume (vph)	608	0	0	295	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1863	0	0	1863	1611	0
Flt Permitted						
Satd. Flow (perm)	1863	0	0	1863	1611	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1326			205	132	
Travel Time (s)	30.1			4.7	3.0	
Peak Hour Factor	0.92	0.92	0.84	0.84	0.50	0.50
Shared Lane Traffic (%)						
Lane Group Flow (vph)	661	0	0	351	2	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 42.0%

ICU Level of Service A

Analysis Period (min) 15

Intersection

Int Delay, s/veh

0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	608	0	0	295	0	1
Future Vol, veh/h	608	0	0	295	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	84	84	50	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	661	0	0	351	0	2

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	661	0	1012 661
Stage 1	-	-	-	-	661 -
Stage 2	-	-	-	-	351 -
Critical Hdwy	-	-	4.12	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	2.218	-	3.518 3.318
Pot Cap-1 Maneuver	-	-	927	-	265 462
Stage 1	-	-	-	-	514 -
Stage 2	-	-	-	-	713 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	927	-	265 462
Mov Cap-2 Maneuver	-	-	-	-	265 -
Stage 1	-	-	-	-	514 -
Stage 2	-	-	-	-	713 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0	12.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	462	-	-	927	-
HCM Lane V/C Ratio	0.004	-	-	-	-
HCM Control Delay (s)	12.8	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Lanes, Volumes, Timings

5: East Genesee Street & Existing Site Access

10/15/2019

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↑	
Traffic Volume (vph)	1	608	293	0	1	2
Future Volume (vph)	1	608	293	0	1	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1863	1863	0	1655	0
Flt Permitted					0.988	
Satd. Flow (perm)	0	1863	1863	0	1655	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		205	115		239	
Travel Time (s)		4.7	2.6		5.4	
Peak Hour Factor	0.92	0.92	0.84	0.84	0.75	0.75
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	662	349	0	4	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 42.8%

ICU Level of Service A

Analysis Period (min) 15

Intersection

Int Delay, s/veh 0.1

Movement EBL EBT WBT WBR SBL SBR

Lane Configurations

		↑	↗	↙	↘
Traffic Vol, veh/h	1	608	293	0	1
Future Vol, veh/h	1	608	293	0	1
Conflicting Peds, #/hr	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop
RT Channelized	-	None	-	None	-
Storage Length	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0
Grade, %	-	0	0	-	0
Peak Hour Factor	92	92	84	84	75
Heavy Vehicles, %	2	2	2	2	2
Mvmt Flow	1	661	349	0	1
					3

Major/Minor Major1 Major2 Minor2

Conflicting Flow All	349	0	-	0	1012	349
Stage 1	-	-	-	-	349	-
Stage 2	-	-	-	-	663	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1210	-	-	-	265	694
Stage 1	-	-	-	-	714	-
Stage 2	-	-	-	-	512	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1210	-	-	-	265	694
Mov Cap-2 Maneuver	-	-	-	-	265	-
Stage 1	-	-	-	-	713	-
Stage 2	-	-	-	-	512	-

Approach EB WB SB

HCM Control Delay, s	0	0	13.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1210	-	-	-	451
HCM Lane V/C Ratio	0.001	-	-	-	0.009
HCM Control Delay (s)	8	0	-	-	13.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Lanes, Volumes, Timings

6: East Genesee Street & Post Office Exit Driveway

10/15/2019

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↘	
Traffic Volume (vph)	0	609	264	0	30	29
Future Volume (vph)	0	609	264	0	30	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1863	1863	0	1696	0
Flt Permitted					0.975	
Satd. Flow (perm)	0	1863	1863	0	1696	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		115	1553		145	
Travel Time (s)		2.6	35.3		3.3	
Peak Hour Factor	0.92	0.92	0.84	0.84	0.67	0.67
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	662	314	0	88	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 42.2%

ICU Level of Service A

Analysis Period (min) 15

Intersection

Int Delay, s/veh 1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	609	264	0	30	29
Future Vol, veh/h	0	609	264	0	30	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	84	84	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	662	314	0	45	43

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	-
Stage 1	-	-	314
Stage 2	-	-	662
Critical Hdwy	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	5.42 -
Critical Hdwy Stg 2	-	-	5.42 -
Follow-up Hdwy	-	-	3.518 3.318
Pot Cap-1 Maneuver	0	-	0 279 726
Stage 1	0	-	0 741 -
Stage 2	0	-	0 513 -
Platoon blocked, %	-	-	
Mov Cap-1 Maneuver	-	-	279 726
Mov Cap-2 Maneuver	-	-	279 -
Stage 1	-	-	741 -
Stage 2	-	-	513 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	16.5
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	400
HCM Lane V/C Ratio	-	-	0.22
HCM Control Delay (s)	-	-	16.5
HCM Lane LOS	-	-	C
HCM 95th %tile Q(veh)	-	-	0.8

Lanes, Volumes, Timings

1: Salt Springs Road & East Genesee Street

10/15/2019

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations	↑	↖		↑		
Traffic Volume (vph)	208	181	0	1018	0	0
Future Volume (vph)	208	181	0	1018	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		175	0		0	0
Storage Lanes		1	0		0	0
Taper Length (ft)			25		25	
Satd. Flow (prot)	1863	1583	0	1863	0	0
Flt Permitted						
Satd. Flow (perm)	1863	1583	0	1863	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1283			368	438	
Travel Time (s)	29.2			8.4	10.0	
Peak Hour Factor	0.80	0.80	0.98	0.98	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	260	226	0	1039	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 56.9%

ICU Level of Service B

Analysis Period (min) 15

Lanes, Volumes, Timings

2: Route 257 & East Genesee Street

10/15/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑		↑	↑		↑	↑		↑	↑	
Traffic Volume (vph)	4	203	1	39	498	52	503	121	68	41	91	18
Future Volume (vph)	4	203	1	39	498	52	503	121	68	41	91	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	135		0	0		0	175		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1861	0	1770	1837	0	1770	1762	0	1770	1818	0
Flt Permitted	0.111			0.451			0.594			0.629		
Satd. Flow (perm)	207	1861	0	840	1837	0	1106	1762	0	1172	1818	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					6				30			8
Link Speed (mph)		30				30			30			30
Link Distance (ft)		368				1326			189			681
Travel Time (s)		8.4				30.1			4.3			15.5
Peak Hour Factor	0.69	0.69	0.69	0.94	0.94	0.94	0.92	0.92	0.92	0.88	0.88	0.88
Shared Lane Traffic (%)												
Lane Group Flow (vph)	6	295	0	41	585	0	547	206	0	47	123	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA		D.P+P	NA		Perm	NA	
Protected Phases		6			2		3 8	3 4 8				4
Permitted Phases	6			2			4				4	
Detector Phase	6	6		2	2		3 8	3 4 8			4	4
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0					4.0	4.0	
Minimum Split (s)	11.5	11.5		11.5	11.5					9.5	9.5	
Total Split (s)	50.0	50.0		50.0	50.0					26.0	26.0	
Total Split (%)	44.6%	44.6%		44.6%	44.6%					23.2%	23.2%	
Maximum Green (s)	44.5	44.5		44.5	44.5					20.5	20.5	
Yellow Time (s)	3.5	3.5		3.5	3.5					3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0					2.0	2.0	

Lane Group	Ø3	Ø7	Ø8
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (ft)			
Storage Lanes			
Taper Length (ft)			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Enter Blocked Intersection			
Lane Alignment			
Median Width(ft)			
Link Offset(ft)			
Crosswalk Width(ft)			
Two way Left Turn Lane			
Headway Factor			
Turning Speed (mph)			
Number of Detectors			
Detector Template			
Leading Detector (ft)			
Trailing Detector (ft)			
Detector 1 Position(ft)			
Detector 1 Size(ft)			
Detector 1 Type			
Detector 1 Channel			
Detector 1 Extend (s)			
Detector 1 Queue (s)			
Detector 1 Delay (s)			
Turn Type			
Protected Phases	3	7	8
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	4.0	1.0	4.0
Minimum Split (s)	9.5	6.5	9.5
Total Split (s)	17.0	7.0	12.0
Total Split (%)	15%	6%	11%
Maximum Green (s)	11.5	1.5	6.5
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0

Lanes, Volumes, Timings

2: Route 257 & East Genesee Street

10/15/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	0.0	0.0		0.0	0.0					0.0	0.0	
Total Lost Time (s)	5.5	5.5		5.5	5.5					5.5	5.5	
Lead/Lag										Lag	Lag	
Lead-Lag Optimize?										Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0					2.0	2.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min					None	None	
Act Effect Green (s)	39.3	39.3		39.3	39.3		41.0	46.5		13.8	13.8	
Actuated g/C Ratio	0.35	0.35		0.35	0.35		0.37	0.42		0.12	0.12	
v/c Ratio	0.08	0.45		0.14	0.90		0.97	0.28		0.33	0.53	
Control Delay	25.0	29.6		24.1	52.2		44.8	6.5		48.4	50.1	
Queue Delay	0.0	0.0		0.0	0.0		8.0	0.3		0.0	0.0	
Total Delay	25.0	29.6		24.1	52.2		52.8	6.9		48.4	50.1	
LOS	C	C		C	D		D	A		D	D	
Approach Delay		29.5			50.4			40.2			49.6	
Approach LOS		C			D			D			D	
Queue Length 50th (ft)	3	159		20	385		~207	26		32	80	
Queue Length 95th (ft)	9	162		44	513		#598	m45		64	127	
Internal Link Dist (ft)		288			1246			109			601	
Turn Bay Length (ft)	200			135						175		
Base Capacity (vph)	82	739		333	733		565	853		214	339	
Starvation Cap Reductn	0	0		0	0		21	287		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.07	0.40		0.12	0.80		1.01	0.36		0.22	0.36	

Intersection Summary

Area Type: Other

Cycle Length: 112

Actuated Cycle Length: 112

Offset: 17 (15%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.97

Intersection Signal Delay: 42.8

Intersection LOS: D

Intersection Capacity Utilization 76.1%

ICU Level of Service D

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

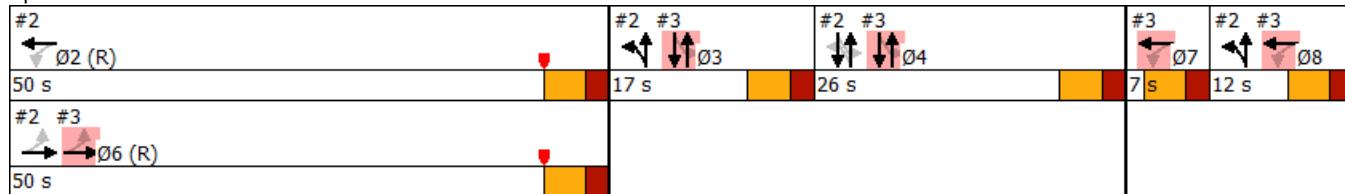
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Route 257 & East Genesee Street



Lane Group	Ø3	Ø7	Ø8
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0
Recall Mode	None	None	None
Act Effect Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			
Intersection Summary			

Lanes, Volumes, Timings
3: Route 257 & Salt Springs Road

10/15/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↔	↑	↑	↑	↑	↑	↑	↔
Traffic Volume (vph)	2	88	91	15	0	390	0	300	6	29	102	0
Future Volume (vph)	2	88	91	15	0	390	0	300	6	29	102	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230			0	0	0	0	0	0	0	0	0
Storage Lanes	1			0	0	0	0	0	0	0	0	0
Taper Length (ft)	25				25			25			25	
Satd. Flow (prot)	1770	1721		0	1617		0	0	1857	0	0	1842
Flt Permitted	0.102				0.981							0.699
Satd. Flow (perm)	190	1721		0	1590		0	0	1857	0	0	1302
Right Turn on Red			Yes				Yes			Yes		Yes
Satd. Flow (RTOR)		55				459				1		
Link Speed (mph)		30				30			30			30
Link Distance (ft)		438				1229			873			189
Travel Time (s)		10.0				27.9			19.8			4.3
Peak Hour Factor	0.81	0.81	0.81	0.85	0.85	0.85	0.80	0.80	0.80	0.74	0.74	0.74
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	221	0	0	477	0	0	383	0	0	177	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1			1	1			1		1	1
Detector Template				Left							Left	
Leading Detector (ft)	50	50			20	50			50		20	50
Trailing Detector (ft)	0	0			0	0			0		0	0
Detector 1 Position(ft)	0	0			0	0			0		0	0
Detector 1 Size(ft)	50	50			20	50			50		20	50
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Turn Type	Perm	NA			Perm	NA			NA		Perm	NA
Protected Phases		6				7 8			3 4			3 4
Permitted Phases	6				7 8						3 4	
Detector Phase	6	6			7 8	7 8			3 4		3 4	3 4
Switch Phase												
Minimum Initial (s)	6.0	6.0										
Minimum Split (s)	11.5	11.5										
Total Split (s)	50.0	50.0										
Total Split (%)	44.6%	44.6%										
Maximum Green (s)	44.5	44.5										
Yellow Time (s)	3.5	3.5										
All-Red Time (s)	2.0	2.0										

Lane Group	Ø2	Ø3	Ø4	Ø7	Ø8
Lane Configurations					
Traffic Volume (vph)					
Future Volume (vph)					
Ideal Flow (vphpl)					
Storage Length (ft)					
Storage Lanes					
Taper Length (ft)					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Turn Type					
Protected Phases	2	3	4	7	8
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	6.0	4.0	4.0	1.0	4.0
Minimum Split (s)	11.5	9.5	9.5	6.5	9.5
Total Split (s)	50.0	17.0	26.0	7.0	12.0
Total Split (%)	45%	15%	23%	6%	11%
Maximum Green (s)	44.5	11.5	20.5	1.5	6.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0

Lanes, Volumes, Timings
3: Route 257 & Salt Springs Road

10/15/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	0.0	0.0										
Total Lost Time (s)	5.5	5.5										
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0										
Recall Mode	C-Min	C-Min										
Act Effect Green (s)	39.3	39.3		20.2			36.0			36.0		
Actuated g/C Ratio	0.35	0.35		0.18			0.32			0.32		
v/c Ratio	0.03	0.35		0.72			0.64			0.42		
Control Delay	22.5	20.4		12.3			38.2			22.6		
Queue Delay	0.0	0.0		5.6			0.6			1.1		
Total Delay	22.5	20.4		18.0			38.8			23.7		
LOS	C	C		B			D			C		
Approach Delay		20.4		18.0			38.8			23.7		
Approach LOS		C		B			D			C		
Queue Length 50th (ft)	1	84		11			244			61		
Queue Length 95th (ft)	6	119		91			284			69		
Internal Link Dist (ft)		358		1149			793			109		
Turn Bay Length (ft)	230											
Base Capacity (vph)	75	716		663			708			496		
Starvation Cap Reductn	0	0		0			0			153		
Spillback Cap Reductn	0	0		132			103			0		
Storage Cap Reductn	0	0		0			0			0		
Reduced v/c Ratio	0.03	0.31		0.90			0.63			0.52		

Intersection Summary

Area Type: Other

Cycle Length: 112

Actuated Cycle Length: 112

Offset: 17 (15%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.97

Intersection Signal Delay: 25.6

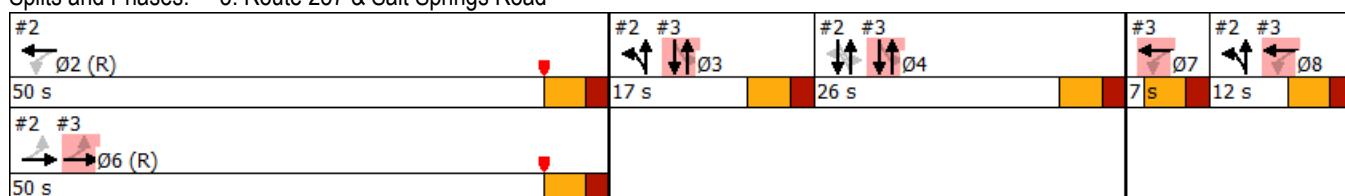
Intersection LOS: C

Intersection Capacity Utilization 75.1%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 3: Route 257 & Salt Springs Road



Lane Group	Ø2	Ø3	Ø4	Ø7	Ø8
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lead	Lag	Lead	Lag
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0
Recall Mode	C-Min	None	None	None	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Queue Length 50th (ft)					
Queue Length 95th (ft)					
Internal Link Dist (ft)					
Turn Bay Length (ft)					
Base Capacity (vph)					
Starvation Cap Reductn					
Spillback Cap Reductn					
Storage Cap Reductn					
Reduced v/c Ratio					
Intersection Summary					

Lanes, Volumes, Timings

4: Tracy Lumber/Proposed Site Access & East Genesee Street

10/15/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑			↔			↔			↔	↑
Traffic Volume (vph)	88	190	3	0	491	38	2	0	2	35	0	52
Future Volume (vph)	88	190	3	0	491	38	2	0	2	35	0	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	0		0	0		0	0		150
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1859	0	0	1844	0	0	1694	0	0	1770	1583
Flt Permitted	0.409							0.822			0.752	
Satd. Flow (perm)	762	1859	0	0	1844	0	0	1427	0	0	1401	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				11			41			58
Link Speed (mph)		30				30			30			30
Link Distance (ft)		1326				205			132			299
Travel Time (s)		30.1				4.7			3.0			6.8
Peak Hour Factor	0.80	0.80	0.80	0.88	0.88	0.88	0.50	0.50	0.50	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	110	242	0	0	601	0	0	8	0	0	39	58
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2			1	2		1	2		1	2
Detector Template				Left			Left			Left		
Leading Detector (ft)	70	156			20	156		20	70		20	70
Trailing Detector (ft)	0	0			0	0		0	0		0	0
Detector 1 Position(ft)	0	0			0	0		0	0		0	0
Detector 1 Size(ft)	30	6			20	6		20	30		20	30
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)	40	150				150			40		40	40
Detector 2 Size(ft)	30	6				6			30		30	30
Detector 2 Type	Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0			0.0			0.0			0.0	0.0
Turn Type	Perm	NA			NA			Perm	NA		Perm	NA
Protected Phases		2			6			3			3	
Permitted Phases	2			6			3			3		3
Detector Phase	2	2		6	6		3	3		3	3	3
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	15.5	15.5		15.5	15.5		11.5	11.5		11.5	11.5	11.5

Lanes, Volumes, Timings

4: Tracy Lumber/Proposed Site Access & East Genesee Street

10/15/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	46.0	46.0		46.0	46.0		20.0	20.0		20.0	20.0	20.0
Total Split (%)	69.7%	69.7%		69.7%	69.7%		30.3%	30.3%		30.3%	30.3%	30.3%
Maximum Green (s)	40.5	40.5		40.5	40.5		14.5	14.5		14.5	14.5	14.5
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	0.0
Total Lost Time (s)	5.5	5.5			5.5			5.5			5.5	5.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	None
Act Effct Green (s)	50.9	50.9			50.9			7.5			7.5	7.5
Actuated g/C Ratio	0.77	0.77			0.77			0.11			0.11	0.11
v/c Ratio	0.19	0.17			0.42			0.04			0.25	0.25
Control Delay	4.3	3.4			4.8			0.5			29.9	11.1
Queue Delay	0.0	0.0			0.0			0.0			0.0	0.0
Total Delay	4.3	3.4			4.8			0.5			29.9	11.1
LOS	A	A			A			A			C	B
Approach Delay		3.6			4.8			0.5			18.6	
Approach LOS		A			A			A			B	
Queue Length 50th (ft)	11	23			74			0			15	0
Queue Length 95th (ft)	26	44			141			0			39	29
Internal Link Dist (ft)		1246			125			52			219	
Turn Bay Length (ft)	200											150
Base Capacity (vph)	587	1433			1424			345			307	393
Starvation Cap Reductn	0	0			0			0			0	0
Spillback Cap Reductn	0	0			0			0			0	0
Storage Cap Reductn	0	0			0			0			0	0
Reduced v/c Ratio	0.19	0.17			0.42			0.02			0.13	0.15

Intersection Summary

Area Type: Other

Cycle Length: 66

Actuated Cycle Length: 66

Offset: 45 (68%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow

Natural Cycle: 40

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.42

Intersection Signal Delay: 5.7

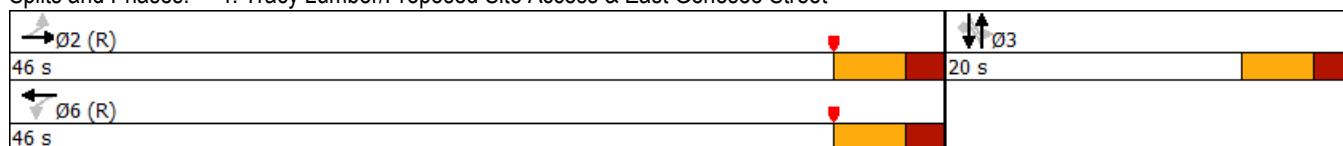
Intersection LOS: A

Intersection Capacity Utilization 57.1%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 4: Tracy Lumber/Proposed Site Access & East Genesee Street



Lanes, Volumes, Timings

5: East Genesee Street & Existing Site Access

10/15/2019

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↓			↖
Traffic Volume (vph)	0	227	522	27	0	7
Future Volume (vph)	0	227	522	27	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1863	1850	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	1863	1850	0	0	1611
Link Speed (mph)		30	30		30	
Link Distance (ft)		205	115		239	
Travel Time (s)		4.7	2.6		5.4	
Peak Hour Factor	0.80	0.80	0.88	0.88	0.50	0.50
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	284	624	0	0	14
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 39.1%

ICU Level of Service A

Analysis Period (min) 15

Intersection

Int Delay, s/veh 0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	227	522	27	0	7
Future Vol, veh/h	0	227	522	27	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	Stop
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	80	88	88	50	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	284	593	31	0	14

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	-
Pot Cap-1 Maneuver	0	-	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.3
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	506
HCM Lane V/C Ratio	-	-	0.028
HCM Control Delay (s)	-	-	12.3
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.1

Lanes, Volumes, Timings

6: East Genesee Street & Post Office Exit Driveway

10/15/2019

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↖	
Traffic Volume (vph)	0	227	522	0	11	27
Future Volume (vph)	0	227	522	0	11	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1863	1863	0	1660	0
Flt Permitted					0.986	
Satd. Flow (perm)	0	1863	1863	0	1660	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		115	1553		145	
Travel Time (s)		2.6	35.3		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.79	0.79
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	247	567	0	48	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 37.5%

ICU Level of Service A

Analysis Period (min) 15

Intersection

Int Delay, s/veh 0.8

Movement EBL EBT WBT WBR SBL SBR

Lane Configurations		↑	↑	▼		
Traffic Vol, veh/h	0	227	522	0	11	27
Future Vol, veh/h	0	227	522	0	11	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	79	79
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	247	567	0	14	34

Major/Minor Major1 Major2 Minor2

Conflicting Flow All	-	0	-	0	814	567
Stage 1	-	-	-	-	567	-
Stage 2	-	-	-	-	247	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	0	-	-	0	347	523
Stage 1	0	-	-	0	568	-
Stage 2	0	-	-	0	794	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	347	523
Mov Cap-2 Maneuver	-	-	-	-	347	-
Stage 1	-	-	-	-	568	-
Stage 2	-	-	-	-	794	-

Approach EB WB SB

HCM Control Delay, s	0	0	13.8
HCM LOS			B

Minor Lane/Major Mvmt EBT WBT SBLn1

Capacity (veh/h)	-	-	456
HCM Lane V/C Ratio	-	-	0.105
HCM Control Delay (s)	-	-	13.8
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.4

Lanes, Volumes, Timings

1: Salt Springs Road & East Genesee Street

10/15/2019

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations	↑	↖		↑		
Traffic Volume (vph)	584	519	0	693	0	0
Future Volume (vph)	584	519	0	693	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		175	0		0	0
Storage Lanes		1	0		0	0
Taper Length (ft)			25		25	
Satd. Flow (prot)	1863	1583	0	1863	0	0
Flt Permitted						
Satd. Flow (perm)	1863	1583	0	1863	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	1283			368	438	
Travel Time (s)	29.2			8.4	10.0	
Peak Hour Factor	0.94	0.94	0.93	0.93	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	621	552	0	745	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 39.8%

ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings

2: Route 257 & East Genesee Street

10/15/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑		↑	↑		↑	↑		↑	↑	
Traffic Volume (vph)	7	576	1	68	397	46	282	122	109	84	147	14
Future Volume (vph)	7	576	1	68	397	46	282	122	109	84	147	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	135		0	0		0	175		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1863	0	1770	1833	0	1770	1730	0	1770	1839	0
Flt Permitted	0.219			0.108			0.475			0.600		
Satd. Flow (perm)	408	1863	0	201	1833	0	885	1730	0	1118	1839	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					6				46			4
Link Speed (mph)		30			30				30			30
Link Distance (ft)		368			1326				189			681
Travel Time (s)		8.4			30.1				4.3			15.5
Peak Hour Factor	0.94	0.94	0.94	0.87	0.87	0.87	0.90	0.90	0.90	0.85	0.85	0.85
Shared Lane Traffic (%)												
Lane Group Flow (vph)	7	614	0	78	509	0	313	257	0	99	189	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12				12			12
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA		Perm	NA		D.P+P	NA		Perm	NA	
Protected Phases		6			2		3 8	3 4 8				4
Permitted Phases	6			2			4				4	
Detector Phase	6	6		2	2		3 8	3 4 8			4	4
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0					4.0	4.0	
Minimum Split (s)	11.5	11.5		11.5	11.5					9.5	9.5	
Total Split (s)	52.0	52.0		52.0	52.0					26.0	26.0	
Total Split (%)	46.4%	46.4%		46.4%	46.4%					23.2%	23.2%	
Maximum Green (s)	46.5	46.5		46.5	46.5					20.5	20.5	
Yellow Time (s)	3.5	3.5		3.5	3.5					3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0					2.0	2.0	

Lane Group	Ø3	Ø7	Ø8
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (ft)			
Storage Lanes			
Taper Length (ft)			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Enter Blocked Intersection			
Lane Alignment			
Median Width(ft)			
Link Offset(ft)			
Crosswalk Width(ft)			
Two way Left Turn Lane			
Headway Factor			
Turning Speed (mph)			
Number of Detectors			
Detector Template			
Leading Detector (ft)			
Trailing Detector (ft)			
Detector 1 Position(ft)			
Detector 1 Size(ft)			
Detector 1 Type			
Detector 1 Channel			
Detector 1 Extend (s)			
Detector 1 Queue (s)			
Detector 1 Delay (s)			
Turn Type			
Protected Phases	3	7	8
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	4.0	1.0	4.0
Minimum Split (s)	9.5	6.5	9.5
Total Split (s)	15.0	7.0	12.0
Total Split (%)	13%	6%	11%
Maximum Green (s)	9.5	1.5	6.5
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0

Lanes, Volumes, Timings

2: Route 257 & East Genesee Street

10/15/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	0.0	0.0		0.0	0.0					0.0	0.0	
Total Lost Time (s)	5.5	5.5		5.5	5.5					5.5	5.5	
Lead/Lag										Lag	Lag	
Lead-Lag Optimize?										Yes	Yes	
Vehicle Extension (s)	2.0	2.0		2.0	2.0					2.0	2.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min					None	None	
Act Effect Green (s)	41.5	41.5		41.5	41.5		41.5	47.0		20.5	20.5	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.37	0.42		0.18	0.18	
v/c Ratio	0.05	0.89		1.05	0.75		0.63	0.34		0.49	0.56	
Control Delay	21.0	49.0		157.6	37.2		16.8	3.7		50.1	47.8	
Queue Delay	0.0	0.0		54.0	0.0		0.4	0.6		0.0	0.0	
Total Delay	21.0	49.0		211.6	37.2		17.2	4.4		50.1	47.9	
LOS	C	D		F	D		B	A		D	D	
Approach Delay		48.6			60.4			11.4			48.6	
Approach LOS		D			E			B			D	
Queue Length 50th (ft)	3	398		~56	302		43	17		65	122	
Queue Length 95th (ft)	13	532		#146	389		#128	19		113	184	
Internal Link Dist (ft)		288			1246			109			601	
Turn Bay Length (ft)	200			135						175		
Base Capacity (vph)	169	773		83	764		494	753		204	339	
Starvation Cap Reductn	0	0		0	0		23	231		0	0	
Spillback Cap Reductn	0	0		26	0		0	0		0	1	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.04	0.79		1.37	0.67		0.66	0.49		0.49	0.56	

Intersection Summary

Area Type: Other

Cycle Length: 112

Actuated Cycle Length: 112

Offset: 42 (38%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.05

Intersection Signal Delay: 41.7

Intersection LOS: D

Intersection Capacity Utilization 77.9%

ICU Level of Service D

Analysis Period (min) 15

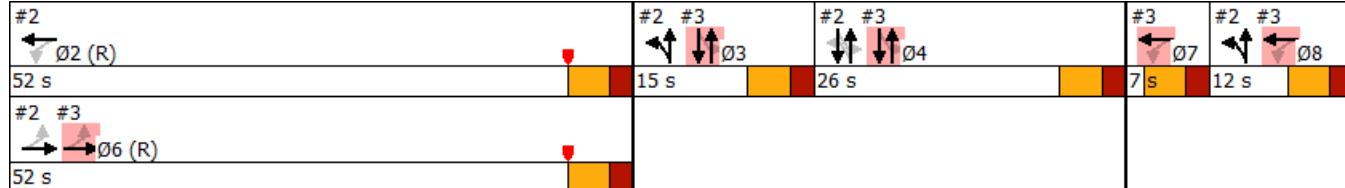
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: Route 257 & East Genesee Street



Lane Group	Ø3	Ø7	Ø8
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0
Recall Mode	None	None	None
Act Effect Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			
Intersection Summary			

Lanes, Volumes, Timings
3: Route 257 & Salt Springs Road

10/15/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↔	↑	↑	↑	↑	↑	↑	↔
Traffic Volume (vph)	14	360	145	9	0	168	0	331	12	77	139	0
Future Volume (vph)	14	360	145	9	0	168	0	331	12	77	139	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230			0	0	0	0	0	0	0	0	0
Storage Lanes	1			0	0	0	0	0	0	0	0	0
Taper Length (ft)	25				25			25			25	
Satd. Flow (prot)	1770	1783	0	0	1621	0	0	1853	0	0	1829	0
Flt Permitted	0.097				0.953						0.461	
Satd. Flow (perm)	181	1783	0	0	1548	0	0	1853	0	0	859	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22				195				2		
Link Speed (mph)		30				30				30		
Link Distance (ft)		438				1229				873		189
Travel Time (s)		10.0				27.9				19.8		4.3
Peak Hour Factor	0.95	0.95	0.95	0.86	0.86	0.86	0.82	0.82	0.82	0.75	0.75	0.75
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	532	0	0	205	0	0	419	0	0	288	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12				0			0
Link Offset(ft)		0			0				0			0
Crosswalk Width(ft)		16			16				16			16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1			1	1			1		1	1
Detector Template				Left							Left	
Leading Detector (ft)	50	50			20	50			50		20	50
Trailing Detector (ft)	0	0			0	0			0		0	0
Detector 1 Position(ft)	0	0			0	0			0		0	0
Detector 1 Size(ft)	50	50			20	50			50		20	50
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Turn Type	Perm	NA			Perm	NA			NA		Perm	NA
Protected Phases		6				7 8			3 4			3 4
Permitted Phases	6				7 8						3 4	
Detector Phase	6	6			7 8	7 8			3 4		3 4	3 4
Switch Phase												
Minimum Initial (s)	6.0	6.0										
Minimum Split (s)	11.5	11.5										
Total Split (s)	52.0	52.0										
Total Split (%)	46.4%	46.4%										
Maximum Green (s)	46.5	46.5										
Yellow Time (s)	3.5	3.5										
All-Red Time (s)	2.0	2.0										

Lane Group	Ø2	Ø3	Ø4	Ø7	Ø8
Lane Configurations					
Traffic Volume (vph)					
Future Volume (vph)					
Ideal Flow (vphpl)					
Storage Length (ft)					
Storage Lanes					
Taper Length (ft)					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Turn Type					
Protected Phases	2	3	4	7	8
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	6.0	4.0	4.0	1.0	4.0
Minimum Split (s)	11.5	9.5	9.5	6.5	9.5
Total Split (s)	52.0	15.0	26.0	7.0	12.0
Total Split (%)	46%	13%	23%	6%	11%
Maximum Green (s)	46.5	9.5	20.5	1.5	6.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	0.0	0.0										
Total Lost Time (s)	5.5	5.5										
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0										
Recall Mode	C-Min	C-Min										
Act Effect Green (s)	41.5	41.5			13.5			40.6			40.6	
Actuated g/C Ratio	0.37	0.37			0.12			0.36			0.36	
v/c Ratio	0.22	0.79			0.57			0.62			0.93	
Control Delay	31.6	38.8			14.6			35.7			61.5	
Queue Delay	0.0	0.0			0.4			0.1			24.3	
Total Delay	31.6	38.8			15.0			35.8			85.8	
LOS	C	D			B			D			F	
Approach Delay		38.6			15.0			35.8			85.8	
Approach LOS		D			B			D			F	
Queue Length 50th (ft)	7	315			7			252			126	
Queue Length 95th (ft)	26	430			67			334			m#264	
Internal Link Dist (ft)		358			1149			793			109	
Turn Bay Length (ft)	230											
Base Capacity (vph)	75	753			358			672			311	
Starvation Cap Reductn	0	0			0			0			33	
Spillback Cap Reductn	0	0			20			10			0	
Storage Cap Reductn	0	0			0			0			0	
Reduced v/c Ratio	0.20	0.71			0.61			0.63			1.04	

Intersection Summary

Area Type: Other

Cycle Length: 112

Actuated Cycle Length: 112

Offset: 42 (38%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.05

Intersection Signal Delay: 43.8

Intersection LOS: D

Intersection Capacity Utilization 71.2%

ICU Level of Service C

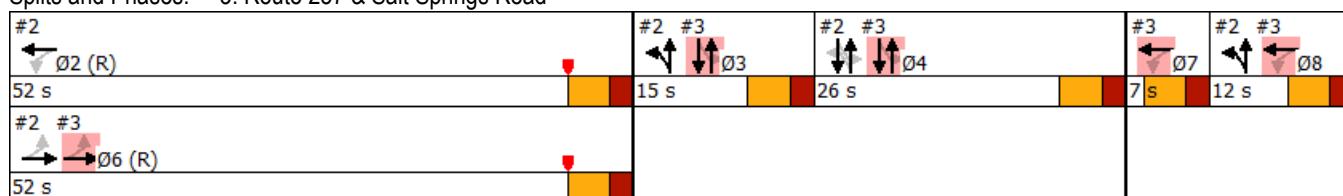
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Route 257 & Salt Springs Road



Lane Group	Ø2	Ø3	Ø4	Ø7	Ø8
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lead	Lag	Lead	Lag
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0
Recall Mode	C-Min	None	None	None	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Queue Length 50th (ft)					
Queue Length 95th (ft)					
Internal Link Dist (ft)					
Turn Bay Length (ft)					
Base Capacity (vph)					
Starvation Cap Reductn					
Spillback Cap Reductn					
Storage Cap Reductn					
Reduced v/c Ratio					
Intersection Summary					

Lanes, Volumes, Timings

4: Tracy Lumber/Proposed Site Access & East Genesee Street

10/15/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑			↔			↔			↔	↑
Traffic Volume (vph)	175	543	0	0	279	61	0	0	1	138	0	125
Future Volume (vph)	175	543	0	0	279	61	0	0	1	138	0	125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	0		0	0		0	0		150
Storage Lanes	1		0	0		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1863	0	0	1818	0	0	1611	0	0	1770	1583
Flt Permitted	0.509										0.757	
Satd. Flow (perm)	948	1863	0	0	1818	0	0	1611	0	0	1410	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					29			293				139
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1326			205			132			299	
Travel Time (s)		30.1			4.7			3.0			6.8	
Peak Hour Factor	0.92	0.92	0.92	0.84	0.84	0.84	0.50	0.50	0.50	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	190	590	0	0	405	0	0	2	0	0	153	139
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	2	2			1	2		1	2		1	2
Detector Template					Left			Left			Left	
Leading Detector (ft)	70	156			20	156		20	70		20	70
Trailing Detector (ft)	0	0			0	0		0	0		0	0
Detector 1 Position(ft)	0	0			0	0		0	0		0	0
Detector 1 Size(ft)	30	6			20	6		20	30		20	30
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0			0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)	40	150			150			40			40	40
Detector 2 Size(ft)	30	6			6			30			30	30
Detector 2 Type	Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)	0.0	0.0			0.0			0.0			0.0	0.0
Turn Type	Perm	NA			NA			NA		Perm	NA	Perm
Protected Phases		2			6			3			3	
Permitted Phases	2			6			3			3		3
Detector Phase	2	2		6	6		3	3		3	3	3
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.0	6.0		6.0	6.0	6.0
Minimum Split (s)	15.5	15.5		15.5	15.5		11.5	11.5		11.5	11.5	11.5

Lanes, Volumes, Timings

4: Tracy Lumber/Proposed Site Access & East Genesee Street

10/15/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	44.0	44.0		44.0	44.0		22.0	22.0		22.0	22.0	22.0
Total Split (%)	66.7%	66.7%		66.7%	66.7%		33.3%	33.3%		33.3%	33.3%	33.3%
Maximum Green (s)	38.5	38.5		38.5	38.5		16.5	16.5		16.5	16.5	16.5
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5			5.5			5.5			5.5	5.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	None
Act Effct Green (s)	42.9	42.9			42.9			12.1			12.1	12.1
Actuated g/C Ratio	0.65	0.65			0.65			0.18			0.18	0.18
v/c Ratio	0.31	0.49			0.34			0.00			0.59	0.34
Control Delay	7.7	8.4			6.4			0.0			33.5	6.9
Queue Delay	0.0	0.0			0.0			0.0			0.0	0.0
Total Delay	7.7	8.4			6.4			0.0			33.5	6.9
LOS	A	A			A			A			C	A
Approach Delay		8.2			6.4						20.8	
Approach LOS		A			A						C	
Queue Length 50th (ft)	29	104			57			0			57	0
Queue Length 95th (ft)	73	208			108			0			102	38
Internal Link Dist (ft)		1246			125			52			219	
Turn Bay Length (ft)	200											150
Base Capacity (vph)	615	1209			1190			622			352	500
Starvation Cap Reductn	0	0			0			0			0	0
Spillback Cap Reductn	0	0			0			0			0	0
Storage Cap Reductn	0	0			0			0			0	0
Reduced v/c Ratio	0.31	0.49			0.34			0.00			0.43	0.28

Intersection Summary

Area Type: Other

Cycle Length: 66

Actuated Cycle Length: 66

Offset: 34 (52%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow

Natural Cycle: 45

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.59

Intersection Signal Delay: 10.2

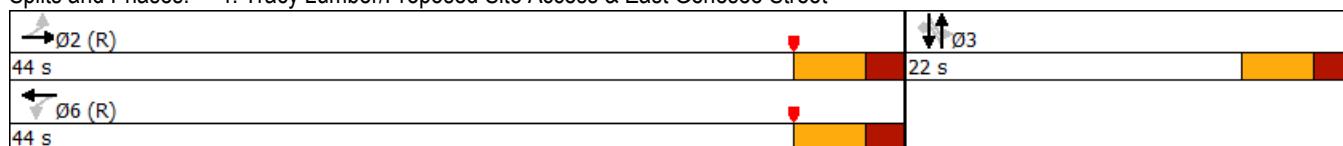
Intersection LOS: B

Intersection Capacity Utilization 75.0%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 4: Tracy Lumber/Proposed Site Access & East Genesee Street



Lanes, Volumes, Timings

5: East Genesee Street & Existing Site Access

10/15/2019

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↓			↖
Traffic Volume (vph)	0	682	327	40	0	13
Future Volume (vph)	0	682	327	40	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1863	1835	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	1863	1835	0	0	1611
Link Speed (mph)		30	30		30	
Link Distance (ft)		205	115		239	
Travel Time (s)		4.7	2.6		5.4	
Peak Hour Factor	0.92	0.92	0.84	0.84	0.75	0.75
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	741	437	0	0	17
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 39.2%

ICU Level of Service A

Analysis Period (min) 15

Intersection

Int Delay, s/veh 0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	682	327	40	0	13
Future Vol, veh/h	0	682	327	40	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	Stop
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	84	84	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	741	389	48	0	17

Major/Minor	Major1	Major2	Minor2	
Conflicting Flow All	-	0	-	389
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	0	659
Stage 1	0	-	0	-
Stage 2	0	-	0	-
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	659
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.6
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	659
HCM Lane V/C Ratio	-	-	0.026
HCM Control Delay (s)	-	-	10.6
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.1

Lanes, Volumes, Timings

6: East Genesee Street & Post Office Exit Driveway

10/15/2019

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↘	
Traffic Volume (vph)	0	682	338	0	30	29
Future Volume (vph)	0	682	338	0	30	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1863	1863	0	1696	0
Flt Permitted					0.975	
Satd. Flow (perm)	0	1863	1863	0	1696	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		115	1553		145	
Travel Time (s)		2.6	35.3		3.3	
Peak Hour Factor	0.92	0.92	0.84	0.84	0.67	0.67
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	741	402	0	88	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 46.0%

ICU Level of Service A

Analysis Period (min) 15

Intersection

Int Delay, s/veh 1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	682	338	0	30	29
Future Vol, veh/h	0	682	338	0	30	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	84	84	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	741	402	0	45	43

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	1143 402
Stage 1	-	-	-	-	402 -
Stage 2	-	-	-	-	741 -
Critical Hdwy	-	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	0	-	-	0	221 648
Stage 1	0	-	-	0	676 -
Stage 2	0	-	-	0	471 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	221 648
Mov Cap-2 Maneuver	-	-	-	-	221 -
Stage 1	-	-	-	-	676 -
Stage 2	-	-	-	-	471 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	20
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	327
HCM Lane V/C Ratio	-	-	0.269
HCM Control Delay (s)	-	-	20
HCM Lane LOS	-	-	C
HCM 95th %tile Q(veh)	-	-	1.1